

Australian Government

Australian Radiation Protection and Nuclear Safety Agency





ANNUAL REPORT



Preliminary pages	2	
Letter of transmittal	5	
ARPANSA snapshot	6	
Part 1: CEO foreword	7	
Part 2: Agency overview	10	
Part 3: Report on performance	16	
Part 4: Management and accountability	57	
Part 5: Financial statements	77	
Part 6: Appendices	123	
Part 7: Reference material	139	

Preliminary pages

Publication details

ARPANSA phone: 03 9433 2211

ARPANSA website: arpansa.gov.au

Email: info@arpansa.gov.au

Offices

Victoria 619 Lower Plenty Road, Yallambie VIC 3085

New South Wales PO Box 655, Miranda NSW 1490

Comments and enquiries

The Australian Radiation Protection and Nuclear Safety Agency welcomes comments and enquiries:

Annual Report Coordinator Australian Radiation Protection and Nuclear Safety Agency 619 Lower Plenty Road, Yallambie VIC 3085 03 9433 2211 info@arpansa.gov.au arpansa.gov.au

Distribution

This report is available from ARPANSA, the ARPANSA website at: arpansa.gov.au/annual-reports and on the Transparency Portal website at transparency.gov.au/publications

Acknowledgements

Thank you to all ARPANSA employees who have contributed to this report.

Designed and typeset by ARPANSA. Printed by CanPrint

Creative Commons



ISSN 1443-0835

With the exception of the Commonwealth Coat of Arms, any ARPANSA logos and any content that is marked as being third party material, this publication, *Annual Report of the Chief Executive Officer of ARPANSA 2021–2022*, by the Australian Radiation Protection and Nuclear Safety Agency, is licensed under a Creative Commons Attribution 3.0 Australia licence (creativecommons.org/licenses/by/3.0/au/). It is a further condition of the licence that any numerical data referred to in this publication may not be changed.

In essence, you are free to copy, communicate and adapt the publication as long as you attribute it to ARPANSA and abide by the other licence terms.

The publication should be attributed as Annual Report of the Chief Executive Officer of ARPANSA 2021–2022.

Acknowledgement of Country

ARPANSA respectfully acknowledges Australia's Aboriginal and Torres Strait Islander communities and their rich culture and pays respect to their Elders past and present. We acknowledge Aboriginal and Torres Strait Islander peoples as Australia's first peoples and as the Traditional Owners and custodians of the land and water on which we rely.

We recognise and value the ongoing contribution of Aboriginal and Torres Strait Islander peoples and communities to Australian life and how this enriches us. We embrace the spirit of reconciliation, working towards the equality of outcomes and ensuring an equal voice.

Reader's guide

The Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) Annual Report 2021–2022 has been prepared in accordance with the Department of the Prime Minister and Cabinet's *Resource Management Guide No. 135, Annual reports for non-corporate Commonwealth entities* updated in May 2022. The guide sets out ARPANSA's annual report obligations under section 46 of the *Public Governance, Performance and Accountability Act 2013* and the Public Governance, Performance and Accountability Rule 2014.

This year's annual report has been prepared to inform Parliament about ARPANSA's performance and activities in 2021–2022.

The report is available online at *www.arpansa.gov.au/annual-reports* as well as on the transparency portal.

PART 1: CEO foreword

CEO Gillian Hirth's foreword.

PART 2: Agency overview

An overview of ARPANSA including its role and functions, organisational structure.

PART 3: Report on performance

ARPANSA's Annual Performance Statement, report on financial performance and key performance highlights.

PART 4: Management and accountability

Information about ARPANSA's governance, external scrutiny, fraud and risk management arrangements, workforce planning and human resources. Part 4 also contains information about workplace health and safety, and freedom of information.

PART 5: Financial statements

Contains ARPANSA's audited financial statements and a report by the Auditor-General.

PART 6: Appendices

This section includes the *Australian Radiation Protection and Nuclear Safety Act 1998* Annual Report requirements including details of advisory bodies.

PART 7: Reference material

Comprises an abbreviations list, glossary, reporting requirements and alphabetical index.

Letter of transmittal



Australian Government

Australian Radiation Protection and Nuclear Safety Agency



The Hon Ged Kearney MP Assistant Minister for Health and Aged Care House of Representatives Parliament House CANBERRA ACT 2600

Re: 2021-2022 Annual Report of the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA)

Dear Minister

I am pleased to present to you the 2021–2022 Annual Report for ARPANSA pursuant to section 46 of the Public Governance, Performance and Accountability Act 2013, which requires that an annual report be given to you as ARPANSA's responsible Minister for presentation to the Parliament, and section 59 of the *Australian Radiation Protection and Nuclear Safety Act 1998* (the ARPANS Act).

As required by the ARPANS Act, this report provides details on:

- the activities of the Chief Executive Officer (CEO), ARPANSA, the Radiation Health and Safety Advisory Council (the Council), the Nuclear Safety Committee (NSC), and the Radiation Health Committee (RHC)
- any directions given to me by the current or previous responsible Ministers under section 16 of the ARPANS Act and any breach of licence conditions by a Licensee, of which I am aware
- all reports I have received from the Council on matters related to radiation protection and nuclear safety or the NSC on matters related to nuclear safety and the safety of controlled facilities, and
- any directions I have given as CEO under section 41 of the ARPANS Act and improvement notices that ARPANSA inspectors have given under section 80A of the ARPANS Act.

I also certify as the accountable authority for ARPANSA that, in compliance with section 10 of the Public Governance, Performance and Accountability Rule 2014, the Agency has conducted fraud risk assessments and developed and implemented fraud control plans; has in place appropriate fraud prevention, detection, investigation and reporting mechanisms that meet the Agency's specific needs; and I have taken all reasonable measures to appropriately deal with fraud relating to the Agency.

Yours sincerely

billen thich

Dr Gillian Hirth CEO of ARPANSA

ARPANSA snapshot

Services





workers

1,376,500 UV swing tags

issued



Talk to a Scientist



Staff

Ongoing and non-ongoing roles as at 30 June 2022



Licences



Webpage statistics





Ultraviolet index page views



Total website users

Part 1: CEO foreword

In my first annual report as the Chief Executive Officer (CEO) of ARPANSA, I would like to start by acknowledging my predecessor Dr Carl-Magnus Larsson who retired on 21 March 2022, after 12 years as CEO. His commitment to transparency, leadership, and strong efforts in fulfilling ARPANSA's core mandate, have positioned the Agency well.

I am pleased to be leading the Agency as we address important strategic government initiatives and programs including the Government's National Radioactive Waste Management Facility (NRWMF) and the development of robust stewardship arrangements for an Australian nuclear-powered submarine capability.

Despite the ongoing challenges presented over the financial year, ARPANSA has continued to meet its mandate of protecting the Australian people and the environment from the harmful effects of radiation through understanding risks, best practice regulation, research, policy, services, partnerships and engaging with the community.

In this foreword I take the opportunity to reflect on the last year and provide an update on key areas.

Strategic government initiatives - acquisition of nuclear-powered submarines

On 16 September 2021, the Australian Government announced the creation of an enhanced trilateral security partnership between Australia, the United Kingdom, and the United States (AUKUS) with one key initiative being Australia's acquisition of nuclear-powered submarines. Since this time, an 18-month consultation process is underway to determine the optimal pathway to achieve this, as well as addressing a range of considerations including upholding the highest non-proliferation standards and establishing and maintaining rigorous nuclear safety, security, and regulatory standards.

As the Australian Government's primary authority on radiation protection and nuclear safety and regulator of Commonwealth entities that use radiation, ARPANSA has a critical role to play in this whole-of-government effort to define the adoption pathway of this technology. This also includes our capacity as a leading contributor to the Australian Government's response in the unlikely event of a nuclear emergency. Our role in this, has and will continue to present some challenges for ARPANSA in resourcing these deliberations while maintaining business-asusual activities. ARPANSA however recognises that opportunities provided through this work will address a range of secondary matters, including achieving national consistency of regulation around Australia and enhancing our domestic readiness and capability to respond to any radiological or nuclear incident.

Integrated Regulatory Review Service

During this financial year, work has been progressing within ARPANSA to address the findings from the International Atomic Energy Agency (IAEA) Integrated Regulatory Review Service (IRRS) mission received by Australia in November 2018. The mission, which resulted in 4 good practices, 23 recommendations and 12 suggestions, was the culmination of many years of work by the Commonwealth and state and territory governments to benchmark ourselves against international best practice.

ARPANSA is preparing for the follow up review mission scheduled for October 2023, which will examine our progress in implementing the suggestions and recommendations. Good progress continues to be made on the findings directed exclusively to ARPANSA with just two of 14 requiring additional work to be ready for closure.

ARPANSA has also been taking an active role in supporting the Environmental Health Standing Committee (enHealth) as it progresses work on the 19 findings under its remit. While a large portion of the findings have yet to

reach a stage of closure, incremental progress is being made across many, particularly with the National Directory for Radiation Protection (2nd Edition) published in October 2021 and work progressing on the National Strategy for Radiation Safety and its accompanying implementation plan.

As we enter the 2022-23 financial year, this work will only intensify and ARPANSA will be playing an active role in ensuring that Australia is well positioned as it submits its Advanced Reference Material for the follow-up IRRS in August 2023.

Supporting safety and quality of Australia's cancer treatment programs

In November 2021, the Australian Government announced \$2.5 million funding for ARPANSA to acquire a new medical linear accelerator (linac) for our Yallambie premises. Since provision of this funding, ARPANSA has made a concerted effort to keep the installation of our new state-of-the-art medical linac on track. The new machine, operating alongside the linac installed in 2019, will support research and calibrations, and guarantee continued delivery of ARPANSA's auditing service for equipment used by radiotherapy service providers in Australia. This will ensure that ARPANSA is well placed to respond to changes in the medical oncology environment and continue to develop and deliver clinically relevant dose calibration and audit services, benefiting the more than 70,000 cancer patients who undergo radiation therapy in Australia every year.

A key use of these linacs is the maintenance of the primary standards for the dosimetry of ionisation radiation. This year ARPANSA published the results from our 'key comparison' of kilovoltage X-rays. Key comparisons are a rigorous scientific exercise to establish the equivalence of radiation measurements in Australia with the rest of the world. While ARPANSA conducts regular comparisons for other purposes, the key comparisons are peer-reviewed and result in the official 'degrees of equivalence', which are made available publicly by the International Bureau of Weights and Measures. Agreement with other countries' measurements indicates that radiation measurements in Australia are accurate and radiation doses can be trusted. Publication is also an authorisation requirement from the National Measurement Institute (NMI) to maintain and disseminate the standard for Australia. This financial year ARPANSA will focus on the key comparisons for megavoltage linear accelerator doses and low energy X-rays.

Radiofrequency electromagnetic energy

Mobile phone networks and other wireless telecommunications sources emit low-level radiofrequency (RF) electromagnetic energy (EME) with some members of the public concerned this might have adverse health effects. This year, through ongoing support under the Australian Government's EME Program, we have worked with key stakeholders to provide trusted information on the science of RF EME, addressing misinformation, and responding to the high level of interest in 5G mobile telecommunications. This has included measurement of EME exposure levels in the community, involvement in international forums (such as the World Health Organization), setting and maintenance of EME standards and provision of expert scientific advice on EME and health to stakeholders. As we move into the 2022–23 financial year (FY), we look forward to finalising the construction of a new anechoic chamber that will cater for millimetre wave frequencies in use for some 5G technologies and ensure ARPANSA remains at the forefront of scientific research. Further information on the program's achievements are included in Case Study 3, in this annual report.

Impact of the pandemic on ARPANSA

There has been no material impact on the financial statement for the year ended 30 June 2022 as a result of Coronavirus disease (COVID-19). However, the COVID-19 pandemic continued presenting a challenge for the Agency with further lockdowns impacting our offices in Melbourne and Sydney, and significant increases in staff or their household members contracting COVID-19 from late 2021. Changes in health regulations and requirements meant

that ARPANSA, and its pandemic response working group, have had to maintain a dynamic approach in provision of advice to ensure we are in alignment with relevant health directions.

Home-based-work arrangements continued to present a primary mechanism by which the Agency could maintain its operations. The Agency also emphasised the importance of COVID-19 vaccination and continued its program of flu vaccinations for staff to help manage the risk of serious respiratory illnesses. After more than two years of the pandemic, we recognise that COVID-19 and other respiratory illnesses will continue to present challenges. To help ensure we maintain operations during this next phase of the pandemic, we continue to review our policies and procedures to explore how we can meet our objectives while managing the risk to staff and stakeholders.

Update on ARPANSA's performance

ARPANSA's performance during 2021–22 is reported on in detail in Part 3: Report on Performance. Our analysis reflects on our key activities and the associated performance measures in our Corporate Plan 2021–22, which demonstrate how we have achieved our purpose. Our performance framework further encourages business areas to seek efficiencies and foster innovation. ARPANSA's dedicated and highly capable and specialised staff underpin all that we deliver and continue to ensure that ARPANSA is Australia's leading authority on radiation protection and nuclear safety.

Fillen Hunch

Gillian Hirth CEO of ARPANSA

Part 2: Agency overview

ARPANSA at a glance

Our vision

A safe radiation environment for the Australian community.

Our purpose

Our purpose is to protect the Australian people and the environment from the harmful effects of radiation.

Role of ARPANSA

ARPANSA, on behalf of the Australian Government, protects the Australian people and environment from the harmful effects of radiation by performing the following functions:

An independent regulator	A health advisor	A service provider
We are the independent regulator of Commonwealth entities that use or produce radiation. Using a risk-informed regulatory approach, we ensure that Licensees take responsibility for protection of people and the environment from the harmful effects of radiation.	We build and maintain expertise in measurement of radiation and assessment of health impacts, including the assessment of risks and responses to radiation incidents. We provide high quality advice to the government and the community.	We offer high quality services for the purpose of protection against the harmful effects of radiation.

Our outcome and objectives

ARPANSA has a single outcome as set out in the Portfolio Budget Statement:

Protection of people and the environment through radiation protection and nuclear safety research, policy, advice, codes, standards, services and regulation.

Program Objective - Program 1.1: Radiation protection and nuclear safety

Protect the Australian people and the environment from the harmful effects of radiation through effective, riskinformed regulation and delivery of services under the ARPANS Act. Scientific knowledge and international best practice are applied to promote awareness of the effects of radiation and a nationally uniform approach to radiation protection of people (the public, workers and patients undergoing medical procedures using radiation) and the environment.

Linked Program

• Department of Health and Aged Care (Health) Program 1.8: Health Protection, Emergency Response and Regulation.

The Department of Health and Aged Care (Health) contributes to Outcome 1, as Health has strategic regulatory policy and national leadership responsibility for radiation protection and nuclear safety, about the regulatory framework. This includes best practice health technologies related to radiation and nuclear safety.

Key Activities

- Initiate, maintain, and promote frameworks for protection and safety.
- Undertake research and provide expert evaluations, advice and services.
- Ensure effective and risk-informed regulation.
- Enhance organisational innovation and capability.

Accountable authority

Established by the ARPANS Act, ARPANSA commenced operations on 5 February 1999. ARPANSA replaced the Nuclear Safety Bureau and the Australian Radiation Laboratory.

The CEO, Dr Gillian Hirth, is the accountable authority of ARPANSA for the 2021-22 reporting period. Dr Hirth was appointed as Chief Executive Officer of ARPANSA from 22 March 2022.

Responsible ministers and portfolio

ARPANSA sits within the Department of Health and Aged Care portfolio.

As of 30 June 2022, portfolio responsibility for ARPANSA sat with the Hon Ged Kearney MP, Assistant Minister for Health and Aged Care.

Location

ARPANSA has offices in Victoria (Yallambie) and New South Wales (Miranda). Eighty-five per cent of staff are located in the Victorian office.

Our staff

As of 30 June 2022, ARPANSA had 125 ongoing staff, 5 non-ongoing staff and one statutory appointment.

Organisational structure

Chief Executive Officer

Dr Gillian Hirth has held the position of Chief Executive Officer (CEO) since March 2022.

The CEO's functions (as set out in the ARPANS Act) include:

- regulating Commonwealth radiation sources and facilities
- promoting uniformity of radiation protection and nuclear safety policy and practices across jurisdictions of the Commonwealth, the States, and the Territories
- providing advice on radiation protection, nuclear safety and related issues
- undertaking research and providing services in relation to radiation protection, nuclear safety and medical exposures to radiation
- monitoring the operations of ARPANSA, the Radiation Health and Safety Advisory Council (the Council), the Radiation Health Committee (RHC) and the Nuclear Safety Committee (NSC)
- reporting on the operations of ARPANSA, the Council, RHC and NSC.

Executive Group

The CEO is supported by the Executive Group (EG), which is comprised of 3 branch heads and 3 office heads. This group provides the CEO with high-level policy and strategic advice, and reports on matters relating to their individual business groups. Together, the CEO and the EG form the leadership team for day-to-day management of ARPANSA.

ARPANSA business groups

ARPANSA has 6 business groups that deliver components of the Agency's strategies and services. Figure 1. 'Organisational chart' shows ARPANSA's organisational structure at 30 June 2022.

Regulatory Services Branch

Regulatory Services Branch provides an independent regulator service to Commonwealth entities that use or produce radiation. Using a risk-informed regulatory approach, we ensure that Licensees take responsibility for protection of people and the environment from the harmful effects of radiation. We:

- assess licence applications, issue authorisations, perform compliance inspections and promote best practice
- assess and issue import and export permits for radioactive material
- assess transport plans and grant approvals for transport of radioactive material
- promote national uniformity in radiation protection policies and practices
- work to achieve the security of radioactive material.

The branch currently oversees 32 facility licences and 59 source licences. The costs for regulatory services are recovered from licence holders and applicants through annual charges and application fees.

Radiation Health Services Branch

The Radiation Health Services Branch provides expertise, specialised resources and services to support the protection of the public, workers and the environment from the hazards of both ionising and non-ionising radiation (NIR). We undertake a range of scientific activities and services to characterise sources of radiation exposures, to assess the risks to people and the environment from exposure to radiation, and to reflect this understanding into advice and guidance to our stakeholders. This Branch comprises 4 sections: Radiation Protection Services, Radiation Research and Advice, Modelling, Assessment and Emergency Preparedness and Monitoring and Emergency Response. The branch undertakes a range of national initiatives including the ultraviolet radiation (UVR) monitoring network, the Australian National Radiation Dose Register (ANRDR) and the radiation monitoring network, established under the terms of the Comprehensive Nuclear-Test-Ban Treaty. Emergency preparedness and response (EPR) systems for field, network and laboratory measurements; and information management and decision-support systems are maintained by the branch and aligned with national planning. This Branch is also responsible for the delivery of the enhanced EME program, as well as research across all modalities of radiation to underpin our advice.

Medical Radiation Services Branch

The Medical Radiation Services Branch provides safety and quality advice on the use of radiation in medicine to all Australians. The branch has 3 sections: Medical Imaging, Primary Standards Dosimetry Laboratory (PSDL), and the Australian Clinical Dosimetry Service (ACDS). The Medical Imaging section is responsible for dose data collection and advice on patient safety within diagnostic imaging and nuclear medicine. The PSDL maintains the Australian primary standard for absorbed dose and, by calibrating hospitals' radiation detectors against the primary standard, ensures that the radiation equipment used by the hospital operate accurately. The ACDS carries out dosimetric audits of linear accelerators used by radiotherapy providers in Australia and New Zealand to verify that the radiation exposure of patients undergoing treatment is correct.

Office of the CEO

The Office of the Chief Executive Officer (OCEO) facilitates, coordinates and supports the activities of the CEO. The OCEO comprises 3 sections: Risk and Quality, Governance and Strategic Partnerships and Communications. The OCEO leads collaboration and communication with the public and government, coordinates international engagement, and supports effective risk and compliance management including maintenance of the ARPANSA Management System. The OCEO also provides advice to the Agency and government on emerging and strategic issues.

Office for Business Support

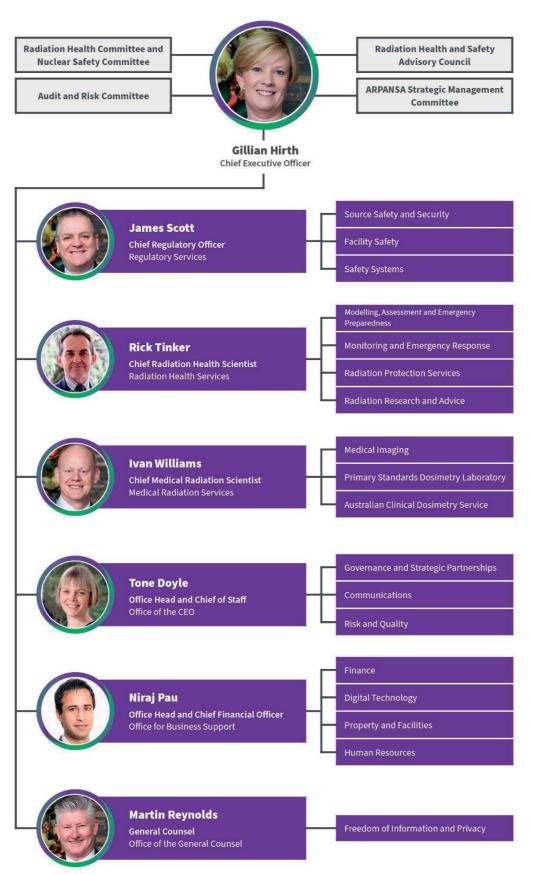
The Office for Business Support (OBS) is home to a number of enabling services and works closely with all branches and offices across the Agency to support their operations. The OBS is responsible for 4 key areas: Finance, Digital Technologies, Human Resources and Facilities and Engineering. The office is involved in continuing to modernise the delivery of customer-centric enabling services to the wider Agency through finding opportunities to enhance business partnering, strategic workforce management and planning, adoption of new technologies and continual review of our business models to ensure the Agency remains fit-for-purpose to deliver its Key Activities.

Office of the General Counsel

The Office of the General Counsel provides legal advice and strategic support to Agency staff regarding all aspects of the Agency's operations and assists the CEO in achieving her statutory mandate. The Office of the General Counsel provides legal services to support staff perform their functions and to ensure that in doing so they are compliant with relevant government policies and legislation. The Office also performs freedom of information (FOI) and privacy functions on behalf of the Agency.

Organisational chart

FIGURE 1: ORGANISATIONAL CHART



Part 3: Report on performance

Annual performance statements

Introductory statement

I, as the accountable authority of the Australian Radiation Protection and Nuclear Safety Agency, present the 2021– 2022 Annual Performance Statement of ARPANSA, as required under paragraph 39(1)(a) of the Public Governance, Performance and Accountability Act 2013 (PGPA Act). In my opinion, this annual performance statement is based on properly maintained records, accurately reflects the performance of the entity, and complies with subsection 39(2) of the PGPA Act.

Man Herry

Dr Gillian Hirth CEO of ARPANSA

Purpose

ARPANSA is responsible for protecting the Australian people and the environment from the harmful effects of radiation.

As Australia's primary authority on radiation protection and nuclear safety:

- We are the independent regulator of Commonwealth entities that use or produce radiation. Using a riskinformed regulatory approach, we ensure that Licensees take responsibility for protection of people and the environment from the harmful effects of radiation.
- We build and maintain expertise in measurement of radiation and assessment of health impacts, including the assessment of risks and responses to radiation incidents.
- We offer high quality services for the purpose of protection against the harmful effects of radiation.

Performance framework

The 2021–22 annual performance statement reflects on how ARPANSA has delivered against its purpose of protecting the Australian people and the environment from the harmful effects of radiation.

Our framework provides an overview of what we did and how it supported the achievement of our key areas of work. To ensure we are transparently assessing our outputs and effectiveness, all our performance information is organised under 4 Key Activities, representing our significant areas of work:

- 1. Initiate, maintain, and promote frameworks for protection and safety.
- 2. Undertake research and provide expert evaluations, advice and services.
- 3. Ensure effective and risk-informed regulation.
- 4. Enhance organisational innovation and capability.

As indicated with the 2021–22 Corporate Plan, ARPANSA has also aligned the performance criteria, outlined in the Portfolio Budget Statements (PBS) 2021–22, against these activities to provide a holistic and integrated perspective of our results. For the 2021-22 reporting period, the Agency identified 24 performance measures, 20 of which were Corporate Plan originated, and 4 established the ARPANSA PBS 2021–22.

Corporate Plan performance measures are referenced numerically as they appear in the 2021-22 plan, while PBS measures are distinguished with the PBS suffix. All measures assessed in this report can be cross-referenced in the 2021-22 Corporate Plan.

ARPANSA has evaluated each measure based on the following gauge (Table 1 evaluation criteria). In situations where multiple targets are attributed to a measure, a conservative approach has been taken to assess the weighting of the measure to determine if the overall measure is compromised.

TABLE 1: EVALUATION CRITERIA

Target achieved	The Agency has succeeded in reaching the agreed target, work has been completed effectively and to the required standard.
Target partially achieved	The Agency has not succeeded in meeting the anticipated target, however significant progress has been made. Work will remain ongoing until completion (< 3 to 6 months).
Target not achieved	The Agency has not succeeded in meeting the anticipated target and significant progress (> 9 months' work remaining) has not been made to assess performance of this measure. The Agency will review the resourcing around delivery of this performance measure and undertake a review to assess impact on our purpose.

Overarching analysis of performance against ARPANSA's purpose

ARPANSA's ability to dynamically adapt is reflected in our achievements against each of our Key Activities. Overall, in 2021–22, ARPANSA achieved 21 performance measures out of 24, a 15 per cent increase in the performance outcomes achieved when compared to 2020–21.

ARPANSA has been diligently working to achieve all performance measures despite a shifting operating environment. Radiation protection and nuclear safety is recognised as a specialised scientific discipline and so it presents a complex operating environment with longstanding and emerging challenges. Our efforts are consistently directed towards the enhancement of radiation protection and nuclear safety outcomes; however, several factors have impacted ARPANSA's effectiveness. These include:

Strategic Australian Government initiatives: During the 2021-22 financial year, an enhanced trilateral security partnership was announced between Australia, the United Kingdom and the United States (AUKUS). Specialists and experts from ARPANSA have been embedded within, and closely engaged with the Department of Defence's Nuclear-Powered Submarine Taskforce. Supporting the Taskforce has impacted ARPANSA's resourcing and infrastructure as our employees have been engaged to provide varying degrees of support. This has required the Agency to flexibly respond, re-evaluating priorities as well as our risk appetite, to support and develop new ways of doing things.

- Resourcing: Budget constraints and the Agency's average staffing level have meant resources were reprioritised to better support the Agency with reactive concerns and circumstances. To support the successful completion of approved projects and minimise the risk to the Agency, ARPANSA took a conservative approach to proactive projects for the latter half of the year. This has ensured our promised deliverables were not compromised and safeguarded the Agency from over capitalising on our limited resources.
- Infrastructure: ARPANSA manages and maintains a number of business-critical assets and specialised infrastructure, including buildings, laboratories, instrumentation and mobile equipment. As a result of non-radiological, chemical safety measures, access to our radiochemistry laboratory was limited, impacting sample processing timeframes and subsequently the analysis of data.
- ARPANSA has prioritised our services, ensuring our contributions minimise radiation risk to the Australian population.

The following statements provide more detailed analysis of ARPANSA's performance results.

TABLE 2: SUMMARY OF RESULTS

Key Activity	Target achieved	Target partially achieved	Target not achieved
1. Initiate, maintain, and promote frameworks for protection and safety	7	0	0
2. Undertake research and provide expert evaluations, advice and services	6	0	0
3. Ensure effective and risk-informed regulation	5	1	0
4. Enhance organisational innovation and capability	3	2	0
Summary	21	3	0

Performance results for Key Activity 1: Initiate, maintain and promote frameworks for protection and safety

ARPANSA developed scientific knowledge to support the frameworks for radiation protection and nuclear safety. These frameworks sit across various sectors, nationally and internationally, and provide guidance that facilitates optimisation of protection against radiation exposure and any associated health impacts. ARPANSA has successfully delivered this Key Activity, with all 7 performance measures achieved.

Number of Diagnostic Reference Level (DRL) surveys per category are sufficient to infer national characteristics per annual survey period. Monitor radiation doses to occupationally exposed workers to provide evidence of optimisation of radiation protection. Compliance with international radiation protection and nuclear safety and security related agreements and treaties. Provide dosimetry support and measurement services to radiotherapy clinics. Engagement with stakeholders to support	 >2,400 surveys per reporting period. Provision of the ANRDR annual newsletter 'ANRDR in Review', reporting trends of radiation doses received by workers. Submission of Australian National reports and completion of the peer-review processes as per the requirements of peer review and/or periodic meeting schedules. 45 audits delivered according to schedule. 	Achieved: 4,040 surveys received. Achieved: 'ANRDR in Review' published June 2022. Achieved: Meetings and reports delivered according to schedule. Achieved: 88 remote audits.
exposed workers to provide evidence of optimisation of radiation protection. Compliance with international radiation protection and nuclear safety and security related agreements and treaties. Provide dosimetry support and measurement services to radiotherapy clinics.	in Review', reporting trends of radiation doses received by workers. Submission of Australian National reports and completion of the peer-review processes as per the requirements of peer review and/or periodic meeting schedules.	'ANRDR in Review' published June 2022. Achieved: Meetings and reports delivered according to schedule. Achieved:
protection and nuclear safety and security related agreements and treaties. Provide dosimetry support and measurement services to radiotherapy clinics.	reports and completion of the peer-review processes as per the requirements of peer review and/or periodic meeting schedules.	Meetings and reports delivered according to schedule. Achieved:
measurement services to radiotherapy clinics.	45 audits delivered according to schedule.	
Engagement with stakeholders to support		117 onsite audits.
information exchange on the proposed licence application to site a NRWMF.	Undertake stakeholder engagement activities for the proposed NRWMF prior to the receipt of a potential licence application. If, and when, a licence application to site a NRWMF is received.	Achieved: No formal requirement; ARPANSA engaged with key stakeholders.
Provide high quality advice to government and the community on health, safety and environmental risks from radiation.	Identify, assess and communicate health, safety and environmental risks from radiation to the Australian Government and community through research, communication, provision of radiation protection services, and community consultation and awareness activities.	Achieved: ARPANSA was engaged on multiple occasions and provided timely responses.
	Review analyse and report on radiation incidents reported to the Australian Radiation Incident Register (ARIR). Prepare an annual summary report for reported incidents from across Australia that occurred in the preceding year. Report to be prepared by end December and published in following quarter.	Achieved: ARIR annual summary report published December 2021.
	Provide information, advice and standards on EME and health to the Australian Government and community through exposure assessment, research, facility upgrades and engagement with international health authorities.	Achieved: ARPANSA provided evidence-based scientific advice on EME and health.
Provide EPR systems for a radiological or nuclear incident.	EPR systems for field, network and laboratory measurements, and information management and decision support systems, are calibrated, tested and exercised to ensure availability, and personnel are trained.	Achieved: All EPR systems were calibrated, tested and exercised.
	Provide high quality advice to government and the community on health, safety and environmental risks from radiation.	Provide high quality advice to government and the community on health, safety and environmental risks from radiation.Identify, assess and communicate health, safety and environmental risks from radiation.Provide high quality advice to government and the community on health, safety and environmental risks from radiation.Identify, assess and communicate health, safety and environmental risks from radiation.Government and community through research, communication, provision of radiation protection services, and community consultation and awareness activities.Review analyse and report on radiation incidents reported to the Australian Radiation Incident Register (ARIR). Prepare an annual summary report for reported incidents from across Australia that occurred in the preceding year. Report to be prepared by end December and published in following quarter.Provide information, advice and standards on EME and health to the Australian Government and community through exposure assessment, research, facility upgrades and engagement with international health authorities.Provide EPR systems for a radiological or nuclear incident.EPR systems for field, network and laboratory measurements, and information management and decision support systems, are calibrated, tested and exercised to ensure availability, and personnel are

Performance measure 1: Number of Diagnostic Reference Level (DRL) surveys per category are sufficient to infer national characteristics per annual survey period

Source: ARPANSA Corporate Plan 2021-22, page 11

How was this performance assessed?

Examination of survey data submitted to the National Diagnostic Reference Level Service (NDRLS). This contributes to the reduction in patient dose associated with diagnostic imaging.

Target: >2,400 surveys per reporting period.

Result: Achieved

Analysis: NDRLS surveys, completed by participating imaging facilities, collect patient dose data from ionising radiation in diagnostic imaging, particularly for computed tomography (CT). ARPANSA's NDRLS received 4,040 surveys of patient dose in CT scans during the 2021-22 financial year, successfully achieving the target. The NDRLS operates on a calendar year; 3,829 surveys were received in 2021, compared to 5,078 in 2020 and 4,781 in 2019. This discrepancy is attributed to a large radiology network not being able to send a bulk submission for 2021. Typically, this network has contributed more than 1,100 surveys in past years. The data received includes surveys from around 400 to 500 scanners, for 7 of the 8 scan categories covered by the diagnostic reference levels and around 350 for kidney-ureter-bladder scans (our newest survey). Based on the submissions, ARPANSA is comfortable this is a suitably representative sample to calculate and establish Diagnostic Reference Levels (DRLs) for common types of CT scans in Australia.

The collection and analysis of DRL surveys directly promotes the safe and effective use of ionising radiation in medicine. The DRLs are used by imaging facilities as a point of comparison, so they can compare their practice with that of their peers. This encourages imaging facilities to review their practice and ensure an appropriate balance of benefit and risk for patients. This helps to avoid excessive radiation dose to patients from medical imaging.

Performance measure 2: Monitor radiation doses to occupationally exposed workers to provide evidence of optimisation of radiation protection

Source: ARPANSA Corporate Plan 2021-22, page 11

How was this performance assessed?

The ANRDR collects information on quarterly-assessed radiation doses for a range of dosimetric quantities and exposures. The data collected is used to monitor individual doses and generate annual statistics related to exposure trends.

Target: Provision of the ANRDR annual newsletter 'ANRDR in Review', reporting trends of radiation doses received by workers.

Result: Achieved

Analysis: In June 2022, a summary of doses held in the ANRDR until the end of 2020 was published on the ARPANSA website at: <u>www.arpansa.gov.au/anrdr-review-2020</u>. Despite issues associated with the submission of files from some organisations, ARPANSA collected the dose reports and applied a range of comparable alternatives to complete the assessment of dose trends. Work is ongoing to improve functionality of the ANRDR to address this matter. The register holds dose records for approximately 55,000 radiation workers, an increase from 47,000 reported this time last year. This includes full coverage of workers from all state and territory-licensed uranium mining and milling operations, and partial coverage of workers from Commonwealth licence holders, state and territory regulatory bodies, and the mineral sands mining and processing industry.

By publishing insights into industry trends and providing comparisons across different work practices, ARPANSA can determine how effective radiation protection programs are. This helps in establishing guidelines to support the optimisation of worker protection.

Performance measure 3: Compliance with international radiation protection and nuclear safety and security related agreements and treaties

Source: ARPANSA Corporate Plan 2021-22, page 11

How was this performance assessed?

Determined through the submission of National Reports (Early Notification and Assistance Conventions 2022 and 2023-24; Joint Convention 2022 and 2024-25; Convention on Nuclear Safety (CNS) 2022-23).

Target: Submission of Australian National reports and completion of the peer-review processes as per the requirements of peer review and/or periodic meeting schedules.

Result: Achieved

Analysis: As the Australian Government's trusted advisor on radiation protection, ARPANSA is responsible for coordinating Australia's compliance with selected international conventions and codes. In June 2022, the Seventh Review Meeting of the Joint Convention commenced, and the Australian report was well received. Overarching issues raised in the review meeting included competence and staffing; linked to the timetable for spent fuel and radioactive waste management programs, public engagement and acceptance on radioactive waste management and spent fuel management programs, and funding of long-term projects. Through engagement and collaboration with these conventions, ARPANSA is positioned to shape and implement global best practice in regulation and radiation protection measures.

Further information on how ARPANSA contributes to international best practice can be found in Case Study 4: The Joint Convention on the Safety of Spent Fuel Management and Radioactive Waste Management.

Performance measure 4: Provide dosimetry support and measurement services to radiotherapy clinics

Source: ARPANSA Corporate Plan 2021-22, page 11

How was this performance assessed?

Measured progressively and reported quarterly. The ACDS audit program ensures accurate and safe treatment delivery for over 70,000 cancer patients across Australia and New Zealand.

Target: 45 audits delivered according to schedule.

Result: Achieved

Analysis: ARPANSA's ACDS performed 65 remote and 110 scheduled on-site audits during the FY 2021-22 reporting period. The service mitigates patient risk by measuring the amount of radiation, or dose, delivered to a simulated patient. The ACDS then compares the measurement against the dose predicted by the facility and determines whether the difference falls within clinically acceptable margins. ARPANSA's PSDL supports both the ACDS and accurate patient treatment nationally. The PSDL maintains and, through calibration, ensures the reference radiation chamber used by Australian radiotherapy providers are delivering the correct dose. Both the PSDL and the ACDS directly contribute to safe patient treatments.

Further information about the development of a new audit can be found in Case Study 2: Australian Clinical Dosimetry Service – Motion adaptive audit project.

Performance measure 5: Engagement with stakeholders to support information exchange on the proposed licence application to site a NRWMF

Source: ARPANSA Corporate Plan 2021-22, page 11

How was this performance assessed?

Evaluated and reported annually via formal submissions, information/consultation meetings; web-based mechanisms hearings; or a combination of several of these activities.

Target: Undertake stakeholder engagement activities for the proposed NRWMF prior to the receipt of a potential licence application. Undertake formal stakeholder engagement activities if, and when, a licence application to site a NRWMF is received.

Result: Achieved

Analysis: There was no requirement for formal stakeholder engagement with communities and interested parties regarding the NRWMF during the year. ARPANSA, however continued to meet with the Australian Safeguards and Non-proliferation Office, the Australian Nuclear Science and Technology Organisation (ANSTO) and the Australian Radioactive Waste Agency on an ongoing basis and field occasional calls from impacted communities, interest groups and the public.

PBS measure 1: Provide high quality advice to government and the community on health, safety and environmental risks from radiation

Source: ARPANSA PBS 2021-22, page 216

How was this performance assessed?

Evaluated based on the continued provision of expert advice, specialised resources and services.

Overall Result: Achieved (3/3)

Advice has been provided when requested, and communications on key topics published on social media in cooperation with ARPANSA's Office of the CEO.

PBS 1.1: Identify, assess and communicate health, safety and environmental risks from radiation to the Australian Government and community through research, communication, provision of radiation protection services, and community consultation and awareness activities

Result: Achieved

Analysis: ARPANSA has been engaged on the following occasions:

- A draft was provided to National Health and Medical Research Council's on risk assessments relating to recreational water.
- Advice provided to The Government of Western Australian on Tellus disposal facility.
- All Environment Protection and Biodiversity Conservation Act 1999 referrals were responded to.
- The dose conversion factor advice on naturally occurring radioactive material nuclides was finalised with subsequent updates to Radiation Protection Series (RPS) No. 9.1 Safety Guide for Monitoring, Assessing and Recording Occupational Radiation Doses in Mining and Mineral Processing.
- Public health advice related to waste disposal was published as an advisory note relating to RPS No. 9.1 Code for Disposal of Solid Radioactive Waste.
- Update of the Department of Veteran Affairs Dose Assessment tool, was provided in May 2022.

PBS 1.2: Review, analyse and report on radiation incidents reported to the Australian Radiation Incident Register (ARIR). Prepare an annual summary report for reported incidents from across Australia that occurred in the preceding year. Report to be prepared by end December and published in following quarter

Result: Achieved

Analysis: The ARIR annual summary report was published in December 2021. A new Noggin based system was introduced in April 2022 following the forced retirement of the previous system due to security vulnerabilities associated with the version of software being used. Approximately 250 incidents have been received for 2022.

PBS 1.3: Provide information, advice and standards on EME and health to the Australian Government and community through exposure assessment, research, facility upgrades and engagement with international health authorities

Result: Achieved

Analysis: The EME program continues to make clear, reliable and reputable information accessible to all Australians. It has demonstrated this through the following initiatives:

- Completion of EME environmental measurements from 50 sites across Melbourne.
- Three successful research applications approved through the EME Program Research Framework, including two collaborations with ARPANSA.
- Participation and attendance at several key international forums, including the World Health Organization, International Commission on Non-Ionizing Radiation Protection Workshop, and BioEM 2022 conference in June 2022.
- A working group, composed of internal and external experts, has been established to review the current EME Report and provide ARPANSA with recommendations for updating the current format and methodology.

Further information on ARPANSA's EME program can be found in Case Study 3: ARPANSA's Electromagnetic Energy Program.

PBS measure 2: Provide emergency preparedness and response systems for a radiological or nuclear incident

Source: ARPANSA PBS 2021-22, page 216

How was this performance assessed?

Based on data collected, via network and laboratory measurements, as well as review of information management and decision support systems.

Target: EPR systems for field, network and laboratory measurements, and information management and decision support systems, are calibrated, tested and exercised to ensure availability, and personnel are trained.

Result: Achieved

Analysis: ARPANSA tests the adequacy of our emergency preparedness arrangements and capability to ensure that learnings are captured, and improvements are incorporated into existing emergency plans. This contributes to Australia's preparedness for a radiological or nuclear incident or emergency. The following occurred in 2021-22:

- ARPANSA responded to a request for assistance under the Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency. ARPANSA and the ANSTO provided personal protective equipment and radiation measurement equipment to Ukraine.
- ARPANSA presented the initial findings from the Radiological and Nuclear National Capability Survey (the survey in December 2021). The survey will help the Agency better understand national capacity and capability to respond to a nuclear or radiological accident. The survey, undertaken through the National Health Emergency Management Subcommittee across all jurisdictions, will guide the strategies to be implemented for maintaining and building national capability and capacity. The information will also be used for updating Australia's registration to the IAEA's Response and Assistance Network.
- Training and testing of revised field response equipment was conducted in conjunction with a radiation survey of the former nuclear test site at Maralinga.
- ARPANSA is part of an inter-departmental committee, the Visiting Ships Panel (Nuclear) (VSP(N)), which oversees the arrangements for visits to Australian ports by Nuclear Powered Warships (NPW). ARPANSA attended the June VSP(N) meeting, where funding for future capability was discussed.
- ARPANSA has supported planned port validations for visiting NPW. Port validations include assessing the emergency plan, running a desktop exercise and physically inspecting the anchorage locations and emergency response facilities.
- ARPANSA has ensured the Australian Radiation Monitoring System has been maintained and is operational during visits.

Performance results for Key Activity 2: Undertake research and provide expert evaluations, advice and services

ARPANSA provided accessible, evidence-based, and risk-informed advice to the Australian Government, industry, and the public through our research advice and services. Our aim is to promote continuous improvement and provide useful and current information to a broad range of audiences so practices can be optimised. ARPANSA has successfully delivered this Key Activity, with all 6 performance measures achieved.

Number	Measure	2021-22 Target	Outcome
6	High quality research in radiation protection, nuclear safety and medical exposures to radiation, are undertaken to improve understanding of radiation and its effects among professionals and the public.	ARPANSA to publish >6 peer-reviewed publications.	Achieved: 19 peer-reviewed publications published.
7	Operation of the Comprehensive Nuclear-Test-Ban Treaty Organisation (CTBTO)International Monitoring System (IMS) radionuclide stations to meet CTBT targets for data availability.	Stations operational and reporting verified data to the CTBTO at >95% average per reporting period.	Achieved: >98% average.
8	Operation of the UVR monitoring network with a high level of data availability to the public.	UV monitoring network data available to the public >95% of the time	Achieved: >99% data availability.
9	High quality and efficient radiation protection services are provided to customers.	Establish baseline.	Achieved: Baseline established (average).
10	Percentage of time the 'Talk to a Scientist' call centre is made available to the public as advertised.	>95%	Achieved: 100% availability.
PBS-3	Promote patient safety in radiotherapy and diagnostic radiology.	Report annually on significant deviations and trends discovered through the ACDS.	Achieved: 'ACDS Year in Review' published June 2022.
		Report annually on significant deviations and trends discovered through the National Diagnostic Reference Level (NDRL) programs.	Achieved: 'NDRL Service Year in Review' published April 2022.

Performance measure 6: High quality research in radiation protection, nuclear safety and medical exposures to radiation, are undertaken to improve understanding of radiation and its effects among professionals and the public

Source: ARPANSA Corporate Plan 2021-22, page 14

How was this performance assessed?

Peer reviewed publications determined by emerging issue and of public interest will be published online progressively and reported on quarterly.

Target: ARPANSA to publish >6 peer-reviewed publications.

Result: Achieved

Analysis: 19 peer-reviewed publications published during the 2021-22 reporting period.

A total of 9 publications from Radiation Health Services.

A total of 10 publications from Medical Radiation Services.

ARPANSA significantly exceeded this target partially due to circumstances presented during the pandemic. This permitted our specialists the time to redirect their efforts towards this measure. Publications in respected journals are important to maintain our reputation as experts in the radiation protection, nuclear safety and medical field.

Performance measure 7: Operation of the CTBTO International Monitoring System (IMS) radionuclide stations to meet CTBT targets for data availability

Source: ARPANSA Corporate Plan 2021-22, page 14

How was this performance assessed?

Data collected from IMS stations maintained by ARPANSA located in Australia and its territories, Fiji and Kiribati.

Result: Achieved

Target: Stations are operational, and reporting verified data to the CTBTO at >95%.

Analysis: The CTBT network reported >98% verified data for this reporting period. Each quarter this minimum requirement was achieved. ARPANSA is responsible for carrying out Australia's radionuclide monitoring obligations to the Comprehensive Nuclear-Test-Ban Treaty (CTBT). The Treaty aims to eliminate nuclear weapons by restricting the development and improvement of new types of nuclear weapons, playing a critical role in working towards a safer and more secure world.

Performance measure 8: Operation of the ultraviolet radiation monitoring network with a high level of data availability to the public

Source: ARPANSA Corporate Plan 2021-22, page 14

How was this performance assessed?

Data extracted from UV network monitoring system and analysis based on average network availability over year.

Target: UV monitoring network data available to the public >95% of the time.

Result: Achieved

Analysis: UV network recorded >99% data availability for this reporting period. Each quarter this minimum requirement was achieved. ARPANSA maintains a network of solar UVR detectors in major Australian cities and in the Australian Antarctic territories. The UVR data is collected continuously by detectors that respond to UVR in a manner similar to human skin and is updated in the UVR Index every minute. The intensity of the sun's UVR that you are exposed to, and the length of time you are exposed for, together determine the UVR dose that you receive on any day. By making this data consistently available to the public, ARPANSA's provides the public with the information they need to protect themselves from the harmful effects of UVR.

Further information on how ARPANSA's supports public understanding of UVR can be found in Case Study 1: Ultraviolet radiation protection.

Performance measure 9: High quality and efficient radiation protection services are provided to customers

Source: ARPANSA Corporate Plan 2021-22, page 14

How was this performance assessed?

Utilisation of the ARPANSA customer service satisfaction surveys and efficiencies in service delivery are implemented based on customer feedback to improve effectiveness.

Target: Establish a baseline.

Result: Achieved

Analysis: Survey results were reviewed to infer a baseline that will enable the Agency to monitor the effectiveness of ARPANSA services. This will position the Agency to focus on the improvement of satisfaction scores and foster continuous improvement. Use of customer service satisfaction surveys will demonstrate how we have improved our service delivery. This will comprise surveys from the following services: Radiofrequency Calibration services, Personal Radiation Monitoring Service (PRMS), PSDL calibrations, UVR Services, and the ARPANSA radiation meter hire service. In delivering these services, ARPANSA strives to ensure that its capabilities and expertise are high quality, sustainable and reflect best practice in radiation protection.

Performance measure 10: Percentage of time the 'Talk to a Scientist' call centre is made available to the public as advertised

Source: ARPANSA Corporate Plan 2021-22, page 14

How was this performance assessed?

Analysis of monthly reports from the Talk to a Scientist system to determine average availability.

Target: Service is available to the public >95% of the time.

Result: Achieved

Analysis: The Talk to a Scientist call centre was made available to the public as advertised (that is at least two scientists available). One hundred per cent staff availability was maintained during the reporting period. ARPANSA provides a unique opportunity for the public and community to talk directly with our scientists on issues about radiation exposure and protection in Australia. This service offers people the opportunity to find answers to science related questions that they have been unable to find using other resources.

PBS measure 3: Promote patient safety in radiotherapy and diagnostic radiology

Source: ARPANSA PBS 2021-22, page 217

How was this performance assessed?

Measured through a combination of annual publications and evaluations based on data collected from the ACDS and DRL programs.

Overall Result: Achieved (2/2)

Analysis: This work helps communicate best practice to the user community and ensure rigorous expert review of their practices.

PBS 3.1: Report annually on significant deviations and trends discovered through the ACDS

Result: Achieved

Analysis: In November 2021, ARPANSA published the ACDS Year in Review 2020-21. The document is targeted at radiotherapy professions and informs them about the methods and rationale behind the ACDS' actions. ACDS audit results were maintained and monitored through the National Data Set. Significant deviations were reported immediately to the Clinical Advisory Group - an independent team of radiation oncology experts established to advise the ACDS on the clinical importance of the findings and any necessary actions. Sixteen 'out of tolerance' were recorded for the 2021-22 reporting period. Additionally, the ACDS communicates significant findings to state and territory regulators through the Radiation Health Committee.

PBS 3.2: Report annually on significant deviations and trends discovered through the National Diagnostic Reference Level (NDRL) programs

Result: Achieved

Analysis: In April 2022, ARPANSA published Technical Report 187 - National Diagnostic Reference Level Service Year in Review 2020. The report summarises the data submitted to the NDRL program in the calendar year 2020 and compares the data to the existing levels to demonstrate the long-term trends.

Performance results for Key Activity 3: Ensure effective and risk-informed regulation

As the regulator of Commonwealth entities, ARPANSA took a graded, risk-informed approach to regulation of radiation sources, radiation facilities and nuclear installations with regulatory activities including licensing, compliance, inspection and enforcement. ARPANSA has overall, achieved the intent of this Key Activity as 5 out of 6 performance measures have been achieved. Progress on outstanding measures will continue until completion and support the successful delivery of our purpose.

No	Measure	2021-22 Target	Outcome
11	Communication with regulated entities is open and transparent.	>20 Information sharing meetings are held with licence holders.	Achieved: 50 Information sharing meetings held.
12	Independent environmental monitoring of airborne discharges and radiation dose rates near major nuclear installations to verify public doses are low.	Publish a yearly summary of independent monitoring results at ANSTO.	Partially Achieved: Summary to be published later in 2022.
13	Commonwealth licence holders apply the principles of radiation protection: - justification - optimisation - limitation.	The radiation dose of the 100 most exposed workers at licensed Commonwealth entities trends downwards over the monitoring period.	Achieved: Downward trend observed over monitoring period.
14	Implement regulatory activities in accordance with Commonwealth Government guidelines for regulator performance.	An annual review of regulatory performance is undertaken and demonstrates conformance with Commonwealth Government guidance for regulatory functions.	Achieved: Annual Review of RPG completed.
15	Constructive feedback from licensed entities is encouraged to highlight strengths, and opportunities are used to drive improvements in our regulatory approach.	An index is developed, based on metrics such as inspection schedule, assessment decision adherence, satisfaction levels and the time taken to issue reports and make regulatory decisions.	Achieved: Assessment undertaken; metrics identified.
PBS-4	Ensure protection of people and the environment through efficient and effective regulation.	Finalise the 14 ARPANSA-specific findings from the Agency, IAEA IRRS mission to Australia. Support the implementation of multi-jurisdictional findings via the enHealth process, including development of the National Strategy for Radiation Protection.	Achieved: Finalised in accordance with the published action plan.

Performance measure 11: Communication with regulated entities is open and transparent

Source: ARPANSA Corporate Plan 2021-22, page 17

How was this performance assessed?

ARPANSA will report on the number of meetings held annually and evaluate any feedback received to determine if the communication is effective.

Target: >20 Information sharing meetings are held with licence holders.

Result: Achieved

Analysis: ARPANSA exceeded this target with 55 meetings held, plus an additional 12 site visits. These meetings included the first in-person licence holder forum since the start of the COVID-19 pandemic. The forum was held at the Australian National University in Canberra and was attended by more than 70 licence holder representatives. Other notable meetings included an executive level meeting with ANSTO, the Department of Defence and Australian Radioactive Waste Agency (ARWA). Using a holistic approach, ARPANSA aims to influence licence holders to improve safety culture, inclusive of leadership and management for safety.

Performance measure 12: Independent environmental monitoring of airborne discharges and radiation dose rates near major nuclear installations to verify public doses are low

Source: ARPANSA Corporate Plan 2021-22, page 17

How was this performance assessed?

Assessed through the analysis of Australian Radiation Monitoring System (ARMS) gamma dose rate data, captured via an automated cloud-based system. ANSTO is the only licence holder authorised to discharge small quantities of radioactivity into the environment.

Target: Publish an annual summary of independent monitoring results at ANSTO.

Result: Partially Achieved

Analysis: Analysis of gamma dose rate data was captured via ARMS. Analysis of samples collected in November was completed after a 4-month delay, with results verified in ARPANSA's radiochemistry laboratory and compared to confirm that most of the radionuclides released to the environment are at levels below the detectable level. The report has been provided to the ARPANSA Regulatory Branch for review and will be issued later in 2022.

Performance measure 13: Commonwealth licence holders apply the principles of radiation protection: justification; optimisation; limitation

Source: ARPANSA Corporate Plan 2021-22, page 17

How was this performance assessed?

Assessed through the quarterly dosimetry data submitted by licensed Commonwealth entities to personal radiation monitoring services.

Target: The radiation dose of the 100 most exposed workers at licensed Commonwealth entities trends downwards over the monitoring period.

Result: Achieved

Analysis: Since this measure was introduced in 2017 the average dose to the 100 most exposed workers (at each licenced entity) has continued to show a small decline from about 0.5 mSv to 0.35 mSv per quarter. The trend for the most exposed individual worker has increased since 2017 from about 1.4 mSv to almost 1.6 mSv per quarter. The statuary dose limit for an individual worker is 20 mSv per year, averaged over 5 years. As this increase, observed in the most exposed individual worker data, is marginal and significantly below the limit, no further investigation is warranted. By looking at the 100 most exposed workers at each licensed facility ARPANSA can better understand our license holder performance and gauge their ongoing efforts to reduce occupational radiation exposure.

Performance measure 14: Implement regulatory activities in accordance with Commonwealth Government guidelines for regulator performance

Source: ARPANSA Corporate Plan 2021-22, page 17

How was this performance assessed?

ARPANSA will use performance information and data to track performance on a quarterly basis. An annual review using claims, arguments and evidence will be conducted to establish if essential controls are applied with minimal burden by a risk informed, open, transparent, and trusted service.

Target: An annual review of regulatory performance is undertaken and demonstrates conformance with Commonwealth Government guidance for regulatory functions.

Result: Achieved

Analysis: ARPANSA performed a self-assessment against the regulatory performance framework (RPF) to ensure regulatory best practice is maintained. The review found that ARPANSA met 9 of its 12 RPF metrics.

This year the majority of measures have been met, however 2 of 12 measures were not met:

Maintaining the required inspection frequencies: ARPANSA's target is 75% in adherence, but performance
has progressively slipped throughout the year (77%, 64%, 62.5%, 56%). This measure was initially
impacted by COVID-19 restrictions, staff absence and a prolonged and elevated number of applications to
assess. COVID-19 restrictions have now been relaxed and the staffing situation is expected to improve with
the return of some staff from extended leave plus recruitment into vacancies. Contributing to this is
ARPANSA's workload pressures, which has grown as the Agency continues to receive a high number of
licence applications and support the AUKUS Taskforce.

• Priority rankings: During this year this process was improved, however this made reporting into the Licensing Administration Database system not possible. The new system that will address this is in development. Failure to meet these measures is indicative of a branch that is under high demand.

Performance measure 15: Constructive feedback from licensed entities is encouraged to highlight strengths, and opportunities are used to drive improvements in our regulatory approach

Source: ARPANSA Corporate Plan 2021-22, page 17

How was this performance assessed?

An index is developed based on metrics such as inspection schedule, assessment decision adherence, satisfaction levels and the time taken to issue reports and make regulatory decisions.

Target: A baseline will be established so this index of key performance can be trended.

Result: Achieved

Analysis: ARPANSA performed a performance assessment based on a range of metrics which also encompassed stakeholder engagement and stakeholder feedback. Metrics relating to schedule adherence and completion of timely assessments were within 10% of respective targets. The metric relating to the review of facility priority rankings (used to apportion resources) was undertaken for 5 of 32 facilities. These reviews were impacted by system changes during the year and there are ongoing concerns that the system is unnecessarily complex. This however did not impact our regulatory activities, with all licence holders inspected at a minimum of once every 3 years across our performance objectives and criteria. The risk ranking helps optimise allocation of resources to determine additional visit requirements however often does not result in substantial changes to the priority list. This review helps establish if essential controls are applied with minimal burden to encourage a risk informed, transparent regulator.

PBS measure 4: Ensure protection of people and the environment through efficient and effective regulation

Source: ARPANSA PBS 2021-22, page 217

How was this performance assessed?

ARPANSA will monitor the progress of the IAEA IRRS findings and deliver them according to the published action plan. At the end of FY 2021-22, ARPANSA had closed out 11 of the 14 findings addressed directly to ARPANSA.

Target: Finalise the 14 ARPANSA-specific findings from the IAEA IRRS mission to Australia. Support the implementation of multi-jurisdictional findings via the enHealth process, including development of the National Strategy for Radiation Protection.

Result: Achieved

Analysis: Australia is a respected partner in the international cooperation on nuclear safety and security. It maintains this position by several means, including sharing its knowledge and learning from international best practice. An IRRS mission has afforded a valuable regulatory benchmarking exercise involving peer review by overseas experts against IAEA Safety Standards. The review focused on Australia's legal and regulatory framework for safety. At the end of FY 2021-22, ARPANSA had closed out 11 of the 14 findings addressed directly to ARPANSA with the below finalised this financial year:

- Suggestion 8 ARPANSA should consider requiring the Licensee to perform severe accident analysis, assess design extension conditions and update final safety analysis accordingly.
- Suggestion 12 ARPANSA should consider applying nuclide specific discharge limits as part of the approved operating limits and conditions.
- Recommendation 9 ARPANSA should further define, develop, and document its processes including sequencing of the processes and the interactions between interfacing processes within the IMS.
- Recommendation 11 ARPANSA should conduct a comprehensive evaluation to determine whether its current regulatory oversight measures (regulations and guides, review and assessment, inspection and licensing) should be modified, based on lessons learned, including but not limited to those identified in the ANSTO independent safety review report, of the events that occurred at the ANSTO Health facility.

Work is ongoing to address:

- Recommendation 8 ARPANSA should enhance its human resource management to include an assessment of the number and capabilities of staff required to effectively perform their regulatory and emergency response duties and enhance their training programme based on an analysis of the necessary skills and competencies, is pending approval for closure.
- Recommendation 18 ARPANSA should strengthen its Incident Management Plan by assigning roles and responsibilities, ensuring all elements of the Plan are tested and addressing lessons learned, is pending approval for closure.

Work will be ongoing in 2022-23 to finalise outstanding findings and prepare material for the IRRS Follow-Up mission scheduled for October 2023. Significant work is also ongoing to support enHealth with addressing of multi-jurisdictional findings owned by them.

Performance results for Key Activity 4: Enhance organisational innovation and capability

By enhancing our organisational innovation and capability ARPANSA ensures our systems, assets, and staff effectively support and efficiently deliver on our purpose. ARPANSA has overall, achieved the intent of this Key Activity as 3 out of 5 performance measures have been achieved. Progress on outstanding measures will continue until completion and support the successful delivery of our purpose.

Number	Measure	2021-22 Target	Outcome
16	Efficient implementation of a whole of Agency Information Technology Roadmap to support the modernisation of services provided.	Implement digital technology initiatives to enhance service delivery, improve customer experience and streamline internal processes.	Partially Achieved: Majority of projects delivered on schedule.
17	Maintaining and improving infrastructure to facilitate efficiency in business-as-usual activities.	Deliver Property and Facilities program of work for 2021-22.	Achieved: All funded projects are on track.
18	Review of business models.	 Business sustainability reviews (including review of pricing, where applicable) will be undertaken in line with the Government's pricing framework and cost-recovery guideline. During 2021-22, ARPANSA will review the following areas. ACDS Regulatory License Fees (recalibration of cost-recovery charges for the next cycle) Import and Export Permits. 	Achieved: All planned reviews complete; efficiencies created.
19	Employee engagement score in annual Australian Public Service (APS) employee census.	Level of engagement >APS average.	Achieved: ARPANSA engagement 75% > APS engagement (73%).
20	Review the workforce plan and develop a	Deliver the revised workforce plan.	Partially Achieved:
	learning and development strategy to support a workforce of highly engaged and committed staff.	Develop the learning and development strategy.	Workforce plan delivered. Learning and development strategy under development.

Performance measure 16: Efficient implementation of a whole of Agency Information Technology (IT) Roadmap to support the modernisation of services provided

Source: ARPANSA Corporate Plan 2021-22, page 19

How was this performance assessed?

Analysis and comparison between projected and actual milestones for IT roadmap program of works.

Target: Implement digital technology initiatives to enhance service delivery, improve customer experience and streamline internal processes.

Result: Partially Achieved

Analysis: Majority of projects have been delivered, with some delayed due to supply chain issues instigated by COVID-19. Delivered projects include:

- Expansion of Microsoft Teams capability with the implementation of Teams Dialling, the telephone capability integrated with Teams, and the installation of Teams Hubs in the majority of Agency meeting rooms to support the hybrid working experience.
- Cyber Security activities, including the expansion of the Agency Security Event and Incident Management system and the implementation of other cyber monitoring systems.
- Corporate projects, including the delivery of the Intranet project, Emergency Management system and the Radiation Incident Management system.
- Significant progress on the implementation of the Laboratory Information Management System has been made which continues into 2022-23.
- Migration of the Agency Information Asset Register to a dynamic data analysis and management platform.

This measure helps ensure ARPANSA's digital technology systems environment is robust and resilient enough to support business continuity and avoid degradation to our property, facilities and digital technology systems.

Performance measure 17: Maintaining and improving infrastructure to facilitate efficiency in business-asusual activities

Source: ARPANSA Corporate Plan 2021-22, page 19

How was this performance assessed?

Analysis of project progress reports in line with schedule of works delivered.

Target: Deliver Property and Facilities program of work for 2021-22

Result: Achieved

Analysis: All the funded projects under the Property and Facilities Program of Works are on track with revised delivery timelines, including the delivery of a new Anechoic Chamber and Security System upgrade project. This has facilitated the improvement of our infrastructure, so the Agency is positioned to deliver better outcomes to the public.

Performance measure 18: Review of business models

Source: ARPANSA Corporate Plan 2021-22, page 20

How was this performance assessed?

Measured through timely completion of the reviews and appropriate adjustments in our pricing structures.

Target: Business sustainability reviews (including review of pricing, where applicable) will be undertaken in line with the Government's pricing framework and cost-recovery guideline. During 2021-22 ARPANSA reviewed the ACDS, Regulatory License Fees (recalibration of cost-recovery charges for the next cycle) and Import and Export Permits.

Result: Achieved

Analysis: This work has created efficiencies and prioritised the sustainability of our operations. This reporting period, the following reviews were completed:

- The review of ACDS's business model was completed in November 2021.
- Revised Service Level Agreement including refined audit modalities were incorporated into the new pricing structure.
- Regulatory License Fees were recalibrated for 2022-23 with revised charges becoming applicable with effect from 1 July 2022.
- Import and Export permits' pricing framework and cost-recovery arrangement were reviewed in line with the Department of Health's Portfolio Charging Review.

Performance measure 19: Employee engagement score in annual APS employee census

Source: ARPANSA Corporate Plan 2021-22, page 20

How was this performance assessed?

APS Census data used as a benchmark to measure the effectiveness of employee engagement activities.

Target: Level of engagement >APS average.

Result: Achieved

Analysis: The Employee Engagement Index score for the APS in 2021 was 73%; ARPANSA's score for 2021 was 75%. ARPANSA's Employee Engagement Index score has consistently been higher than that of the <u>APS average</u> - 2020: APS 73%, ARPANSA 77%; 2019: APS 72%, ARPANSA 73%.

Employee engagement is more than simply job satisfaction or commitment to an organisation. It is the extent to which employees are motivated, inspired and enabled to improve an organisation's outcomes. High levels of employee engagement are strongly associated with positive benefits such as increased performance and productivity.

Performance measure 20: Review the workforce plan and develop a learning and development (L&D) strategy to support a workforce of highly engaged and committed staff

Source: ARPANSA Corporate Plan 2021-22, page 20

How was this performance assessed?

Analysis of project milestones, in line with project schedule.

Overall Result: Partially Achieved (1/2)

ARPANSA's ongoing commitment to developing and supporting our people continues to remain a priority for the Agency. The Agency has recognised this key enabling area will require further attention in FY 2022-23. The Agency will monitor and deliver all outstanding components while assessing future requirements.

20.1. Deliver the revised workforce plan

Result: Achieved

Analysis: The ARPANSA Workforce Strategy 2022-25 and Program Plan was approved in June 2022 following EG review and a 4-week staff consultation period.

The purpose of the ARPANSA Workforce Strategy 2022-25 Program Plan is to set out the work packages and deliverables that will enable ARPANSA to carry out its functions and achieve its objective through its people.

The outcomes the Agency seeks to realise from implementation of the Workforce Strategy are:

- sustainable capability: the right people with the right capabilities, experience and knowledge in the right roles delivering continuity of service to internal and external stakeholders
- employer of choice: an improved employee experience that attracts, retains and engages expert and high performing people
- strategic alignment: clear line of sight between our roles and ARPANSA's purpose.

20.2 Develop the learning and development strategy

Result: Partially Achieved

Analysis: Due to resourcing constraints and external regulatory obligations this work was unable to be completed according to schedule. The Agency remains focussed on the configuration and establishment of LearnHub as the centralised learning management system, followed by the integration of external training products such as Safety Hub.

ARPANSA Case studies

To provide a holistic view of our Agency's performance ARPANSA has developed the below case studies to highlight several of the Agency's achievements in 2021–22.

Case study 1: Ultraviolet radiation protection

Linked to Key Activity 2: Undertake research and provide expert evaluations, advice and services.

ARPANSA undertakes research, reviews, and collaborations to support public understanding and enhance protections from the harmful effects of UVR. Some of ARPANSA's major projects and achievements in the UVR space in 2021-22 included:

SunSmart app

ARPANSA partnered with the Cancer Council and the Bureau of Meteorology to create the SunSmart Global UV App. Launched in June 2022, the app provides users around the world with easy-to-follow sun protection information based on their geographical location. ARPANSA's contribution involved sharing data from its network of UVR detectors, based in major Australian cities and in the Australian Antarctic territories. This ensures that the app provides accurate real-time UV Index to users and acts as a trusted source of radiation health and safety information.

More information is available at: <u>www.arpansa.gov.au/news/arpansa-boosts-uv-protection-globally</u>.

Review paper - Sunscreen saves skin

ARPANSA led a review of the benefits and risks of sunscreens, compliance requirements and how sunscreen should be used for optimal effectiveness. Published in the *Public Health Research and Practice Journal* (PHRP) in March 2022, the review paper concluded that sunscreen is safe to use and, when applied correctly, reduces the risk of skin cancer and sunburn. While the review found positive evidence of Australians protecting their skin from UVR over the years, results showed that there is still work needed to encourage and educate Australians to use sunscreen regularly in combination with hats, clothing, sunglasses and shade.

The review is available at: <u>www.phrp.com.au/issues/march-2022-volume-32-issue-1/sunscreen-effectiveness-</u> <u>compliance-and-application/</u>

Scientific report - Aerosol sunscreens inadequate for sun protection

During 2021, ARPANSA partnered with Griffith University to provide expert advice and assistance in the development of the university's scientific report, *Testing Aerosol Sunscreen Products: Exploring the Impact of Wind on the Application of Sunscreen*. ARPANSA contributed to the report by providing analyses on weather data and the impact of the wind on aerosol sunscreens. The study followed on from 2019 research and found that aerosol sunscreens were inadequate for sun protection, as a large percentage of the sunscreen does not reach the skin when sprayed at the recommended distance. ARPANSA recommends that users opt for other SPF products with a more reliable application method, like a cream or a lotion.

The study is available at:

www.arpansa.gov.au/sites/default/files/aerosol_sunscreen_report_november_2021_0.pdf

Research article - Antarctic ozone hole

ARPANSA's measurements of the UV Index in Antarctica have contributed to a paper examining the characteristics of the 2020 Antarctic ozone hole. In collaboration with researchers from the Australian Antarctic Division, Commonwealth Scientific and Industrial Research Organisation (CSIRO), the Bureau of Meteorology, the National Institute of Water and Atmospheric Research (New Zealand) and the Naval Research Laboratory (USA), the paper reported a variety of data to compare and contrast the behaviour of the ozone hole with earlier years. The main feature of the 2020 ozone hole was its relatively large size and persistence to the beginning of the 2020/2021 summer. This led to new records being set for the maximum ozone hole daily area and ozone mass deficit as well as the measurement of new maximum values of UVR at Australia's three Antarctic research stations. The paper was published in the *Journal of Southern Hemisphere Earth Systems Science* in March 2022.

The paper is available at: <u>www.publish.csiro.au/es/pdf/ES21015.</u>

Case study 2: Australian Clinical Dosimetry Service - Motion adaptive audit project

Linked to Key Activity 1: Initiate, maintain and promote frameworks for protection and safety

Medical procedures in diagnosis, intervention and therapy are the largest source of ionising radiation exposure to the Australian population. ARPANSA seeks to ensure that all use of radiation in medical procedures is justified and takes due account of patient safety. ARPANSA uses audits to influence practices and behaviour of our audience.

In 2021, ARPANSA's ACDS commenced the development of an audit to include respiratory motion and motion management techniques in radiation treatment. Motion management techniques aim to tackle the challenge of accounting for a patient's breathing (or respiration) motion during radiation therapy, while ensuring that the radiation dose is still safe and effective.

The motion adaptive audit project was initiated in collaboration with the Peter MacCallum Cancer Centre and Royal Melbourne Institute of Technology. Novel research is being conducted to develop an efficient and robust means of quantifying the accuracy of radiation treatments using motion management techniques.

As part of this research, a survey of all Australian and New Zealand radiation therapy providers was conducted to find out if and how they manage motion at their clinics. Of facilities in the region, 78% (87/111) completed the survey in full, with results indicating that motion management is performed by almost all participating facilities. This allowed the ACDS to build a picture of the most common clinical workflows involving motion management.

The results of the survey were presented at the 2021 Engineering and Physical Sciences in Medicine Conference and in a poster presentation at the 2022 European Society for Radiotherapy and Oncology Congress.

ARPANSA is modifying its Magnetic resonance imaging (MRI) compatible motion phantom to enable relevant clinical workflows to be replicated during an ACDS audit. A phantom is a specially designed substitute for human tissue that can be used to simulate the end-to-end process of radiation therapy, from imaging through to treatment delivery.

The motion adaptive audit project delivers a new audit offering to enhance ACDS capability and continue to provide assurance and dose accuracy for around 70,000 Australians who will be treated with radiotherapy for cancer each year.

Case study 3: ARPANSA's Electromagnetic Energy Program

Linked to Key Activity 1: Initiate, maintain and promote frameworks for protection and safety

ARPANSA's 2020-2024 EME Action Plan details planned activities under the Australian Government's enhanced EME program. ARPANSA progressed the following key initiatives in the action plan's second year.

Providing information

A key aim of the EME program is to increase public knowledge and awareness of radio wave safety and health.

During 2021-2022 ARPANSA has:

- published news updates and conducted social media campaigns on EME research, National Science Week, and the Talk to a Scientist Program
- hosted a public online event about 5G and health as part of National Science Week
- distributed 2 editions of a twice-yearly EME newsletter to stakeholders
- presented on EME and health at several government, stakeholder, and public forums.

Assessing EME exposure in the community

In March and April 2022, ARPANSA scientists visited 50 sites across metropolitan Melbourne to measure public exposure to radiofrequency EME, also known as radio waves.

Under the action plan, the aim of assessing EME exposure in the community is to better understand:

- What is the typical EME exposure in the everyday environment?
- What is the cumulative exposure from different telecommunications sources?
- How does the EME exposure change over time?

The 2022 measurements indicate variability across metropolitan Melbourne; however, in all cases, public exposure from all sources was well below the limits in the safety standard. The two main exposure sources were found to be broadcast radio and mobile phone base stations.

This study was the first large-scale survey conducted by ARPANSA since 2013. Back then, 4G had just been introduced and analogue TV had been replaced by digital TV. The new measurements are the first ARPANSA measurements to include radio waves used in the 5G network.

Melbourne's measurements are representative of the EME exposure that ARPANSA would expect to see in other major Australian cities. There are plans to conduct measurements in regional Victoria to better understand public exposure in country towns.

These results will be published in a peer-reviewed journal and on the ARPANSA website in 2022-2023.

Research

A key initiative of the 4-year action plan is to promote, coordinate, fund, and lead EME research. In September 2021, ARPANSA launched a research framework to support projects investigating radio wave exposures and health. RMIT University was awarded \$140,000 to investigate the impact of NIR on cell permeability. The study fills a gap in current research through investigation of potential non-thermal effects of higher frequency radio waves. In addition to supporting this major project, ARPANSA also conducted the following research activities during 2021-22:

- ARPANSA and Swinburne University collaborated to produce a systematic map of the scientific evidence into the impact of radio waves on the environment. A protocol on the methods of the systematic map was published in the journal *Environmental Evidence*.
- ARPANSA, Monash University, Swinburne University and the Karolinska Institute are collaborating on a World Health Organization systematic review on the exposure to radio waves on cognition in human observational studies. A protocol on the methods of the systematic map was published in the journal *Environment International*.
- Combined supervision of a PhD student at Monash University to investigate occupational RF exposure, health, and risk perception.

International engagement

ARPANSA continued to engage with international health authorities including the World Health Organization and International Commission on Non-Ionizing Radiation Protection on several research initiatives. In June 2022, ARPANSA experts attended the Bioelectromagnetic Conference in Japan to share research on radio waves and health.

Case study 4: The Joint Convention on the Safety of Spent Fuel Management and Radioactive Waste Management

Linked to Key Activity 1: Initiate, maintain and promote frameworks for protection and safety

ARPANSA works with stakeholders around the world to contribute to international best practice in radiation and nuclear safety. In June 2022, ARPANSA led Australia's delegation to the Seventh Review Meeting of the IAEA Joint Convention on the Safety of Spent Fuel Management and Radioactive Waste Management in Vienna.

ARPANSA and the Joint Convention

The Joint Convention represents a commitment by participating countries to achieve and maintain a consistently high level of safety in the management of spent fuel and radioactive waste, as part of the global safety regime for ensuring the protection of people and the environment.

The review meetings occur every 3 years and promotes discussion and knowledge sharing amongst participating countries to support safe and effective management of spent fuel and radioactive waste globally.

ARPANSA led the Australian delegation, with Dr Rick Tinker delivering the National Presentation for Australia. The Australian delegation comprised experts from:

- ARPANSA
- Australian Radiation Waste Agency (ARWA)
- ANSTO
- the Counsellor (Nuclear) Australian Embassy and Permanent Mission to the UN and International Organisations.

Convention outcomes

The presentation discussed:

- the Australian Government's planned NRWMF including licencing processes, waste acceptance criteria, safety case and stakeholder engagement
- reprocessing of spent fuel abroad, repatriation of the reprocessed waste, disposal policy and provisions for intermediate level waste
- the implementation of uniform requirements for legacy site management across jurisdictions.

Australia received five *Challenges*, one *Suggestion*, 4 areas of *Good Performance*, and one *Good Practice*. This was one of only 13 *Good Practices* that were awarded during the Joint Convention.

Challenges and Suggestions

Australia received 5 challenges to address at the next Review Meeting. These were related to resourcing, development and implementation of a national decommissioning policy, emphasis on community consent for establishing the NRWMF, achieving national uniformity in regulating the management of legacy sites across Australia and development of a national policy and strategy for disposal of Intermediate Level Waste (ILW).

Australia also received one suggestion, which was to develop a comprehensive assessment of nuclear and radioactive installations and liabilities for decommissioning planning.

Good Performance

Australia received 4 Areas of *Good Performance* related to enhancing its institutional infrastructure for the safe management of radioactive waste - by adopting the National Radioactive Waste Framework, the creation of the ARWA and defining disposal pathways for all types of radioactive waste streams. Also earning Australia an Area of *Good Performance* was the decision for a centralised location for the storage of waste at the NRWMF, the section of a NRWMF site using a voluntary process (and involving significant engagement with local communities including indigenous peoples), and international cooperation regarding the repatriation of waste from the United Kingdom during the COVID-19 pandemic.

Good Practice

The *Good Practice* was awarded to recognise Australia's mobilisation of all 9 independent regulatory authorities across the country to participate in a comprehensive IRRS mission in 2018 (<u>www.arpansa.gov.au/regulation-and-licensing/regulation/independence/independent-review-of-regulatory-activities/integrated-regulatory-review-service</u>). This was the first time a review had been undertaken to effectively align all authority regulatory instruments within a Federated country. The review and associated actions have strengthened the national uniformity, consistency, and safety of radioactive waste management practices in Australia.

The Eighth Review Meeting is scheduled to be held in March 2025.

The Summary Report for the Seventh Review meeting of the Joint Convention can be found at: <u>www.iaea.org/sites/default/files/22/07/summary-report-seventh-review-meeting.pdf</u>

ARPANSA projects

ARPANSA's EG monitors all strategic projects to ensure the Agency's priorities are managed and resources transparently utilised. All our projects have been aligned to a key activity, ensuring the work undertaken underpins the delivery of our purpose.

KA: Linked to Key Activity

Projects completed in FY 2021-22:

KA	Duration Summary
3	n PlanDec 2018 to Jun 2022The IRRS strengthens and enhances the effectiveness of government regulatory infrastructure for nuclear, radiation, radioactive waste, and transport safety. The ARPANSA specific findings have been addressed, see PBS.4 Performance Annual Summary, however monitoring work is ongoing. The Follow Up mission has been scheduled for October 2023, with preparations such as development of the Advanced Reference Material progressing. ARPANSA is working closely with the Department of Health and Aged Care to progress these with two findings provisionally addressed, as at the end of FY 2021-22.
3	entionJul 2019 to May 2022The Joint Convention requires Contracting Parties to report and to promote open and transparent discussions on the safety of spent fuel and radioactive waste management. Australia's 7th National Report to the Joint Convention was published in October 2020. Due to the pandemic the international peer review process was delayed. Over the last 12 months the project team have facilitated Australia's review of other national reports and answered all questions asked on Australia's national report. An Australian delegation led by ARPANSA attended the Review Meeting in June 2022.
1	Feb 2021 to Dec 2021 This project has implemented a new framework that adopts the Australasian Inter service Incident Management System (AIIMS) at ARPANSA. This is used nationally by most emergency services and stakeholders, increasing interoperability. Staff have been trained in the AIIMS framework and methodology, along with the procurement and implementation of a fit-for-purpose software platform, Noggin. The framework, training and software have been embedded and utilised for several incidents and exercises relating to emergency preparedness.
4	Jul 2018 to Jun 2021ARPANSA's new Intranet went live in June 2021. It has delivered improved search for locating corporate information and an ability for staff to engage with content via comments and likes. The increased self-service allows the communications team to spend less time on content management. The project contributes to ARPANSA's digital transformation and provides a basis for further transformation and continuous improvement.
4	Dec 2016The ARPANSA management system (AMS) manages policies and procedure for the Agency to ensure consistency. Phase one of this project has been closed and a new project will be created for phase two of the AMS. A consistent approach enhances our Agency workflow and supports an efficient way of working.
4	IndJul 2020 toThe property and facilities project supports the improvement of ARPANSAJun 2022infrastructure. All the funded projects under the program of works were delivered according to the indicated timelines for the FY 2021-22.•Switchboard replacement (phase 2) – Complete ••Relocation of LINAC center - EME program – Complete
	Intto Dec 2021Agency to ensure consistency. Phase one of this pr project will be created for phase two of the AMS. A our Agency workflow and supports an efficient wayIndJul 2020 to Jun 2022The property and facilities project supports the im infrastructure. All the funded projects under the pr according to the indicated timelines for the FY 202.Image: WorksSwitchboard replacement (phase 2) - Co

Basement toilet refurbishment – Complete
 Installation of alternate heating option for northeast wall using radiator heating (phase 2) – Complete.

FY 2021-22 progress for ongoing projects:

KA	Project	Duration	Status	Summary
4	Platforms and systems	Jul 2019 to Sep 2023	On track	 The purpose of the Platforms and Systems (PAS) project is to create an Agency-wide shared view of our future technology requirements, to understand our needs and allow for growth. This body of work has 2 ongoing projects: The laboratory information management system project will consolidate ARPANSA's bespoke laboratory systems to a single common platform. Significant progress has been made on the implementation of the first 2 laboratories which are scheduled to go live in the first quarter of FY 2022-23. The next PAS roadmap project is the Regulatory Administration Database to effectively manage the complex work undertaken in the Regulatory Services Branch. Specifications gathering leading to an approach to market will commence in FY 2022-23.
2	Sunscreen testing	Jun 2020 to Jun 2023	On track	Testing sunscreen on humans is the current international standard to rate ultraviolet radiation (UVR) protection performance. This testing involves volunteers wearing sunscreen and being exposed to artificial solar UVR to measure the performance by the time taken for sunburn to occur. This project is a collaborative research program between ARPANSA, RMIT University and Cancer Council Victoria to develop evidence-based methodologies for human-free sunscreen testing technology. The team has developed a prototype sensor that changes colour when exposed to UVR which mimics human skin. Work on this project was impacted by COVID-19 restrictions and to accommodate RMIT staff changes, however the project is now on track and work will remain ongoing in FY 2022-23.
3	Sandy Ridge assessment	Feb 2020 to Aug 2022	On track	ARPANSA was contracted to review the Safety Case for proposed disposal of radioactive waste at the Sandy Ridge site in Western Australia (WA). The Radiological Council of Western Australia have requested support from ARPANSA to provide an independent assessment of the radiological aspects for a proposed near-surface waste repository in WA (The Sandy Ridge Project). In 2019, ARPANSA undertook an initial assessment of the adequacy of the information provided in the safety case and evaluation of radiological impacts. This review looks at updated documentation provided and will focus on whether the comments made by ARPANSA in the 2019 assessment have been adequately addressed. Any assessment will be made against Commonwealth guidance and international best practice. A report has been provided to the WA regulator to assist with their licensing decision.
1	Anechoic chamber upgrade	Jul 2020 to Dec 2022	On track	The upgraded microwave anechoic chamber will be a state-of-the-art facility to extend ARPANSA's measurement capability which will support research and calibration activities including coverage of 5G and future technologies. The shipment of chamber construction material has arrived at the ARPANSA laboratories and is being securely stored. Building works

				have been completed to prepare the space in which the chamber is to be
				installed. Installation, commissioning, and acceptance testing of the chamber and instrumentation are expected to take place from work in the first quarter of FY 2022-23.
2	A primary standard water calorimeter	Nov 2020 to Jul 2024	On track	This project will deliver a water calorimeter system that will replace the existing graphite calorimeter as the Australian Primary Standard for radiation dose in megavoltage photon and electron beams. The primary standard underpins radiation oncology treatment domestically, presenting the opportunity to provide primary measurements of radiation dose in new proton facilities in Australia. The calorimeter has been constructed in Canada and is undergoing initial testing.
4	Cyber Security Improvement Plan	Apr 2022 to Sep 2022	On track	In July 2021 a review of ARPANSA's cyber security position was undertaken and a 3-year Cyber Security Improvement Plan was produced. The plan contains detailed plans to address identified risks, enhance understanding and implement improved practices to strengthen the Agency's cyber security capability and resilience. Funding for essential urgent activities was approved and work is progressing for penetration testing of internet facing systems and the implementation of web application firewalls for customer facing applications. Delivery of these projects is scheduled to be completed in FY 2022-23.
1	New linac	Dec 2021 to Dec 2022	On track	ARPANSA is mandated to ensure the safe use of radiation in Australia. This project ensures our medical radiation services stays at the forefront of international best practice. ARPANSA will procure this new state-of-the- art piece of equipment to help create optimal results for cancer patients undergoing radiotherapy in Australia. The new linac will replace our old one and be housed in a newly constructed bunker. The project will provide consistency between the two linacs in terms of operations, software and performance supporting a more effective and efficient utilisation of resources. The old linac was removed in May and a disposal certificate was issued. The scope of works to update the bunker has been agreed and plans are being prepared. Delivery of the replacement linac is scheduled for the second quarter of FY 2022-23.
4	ARPANSA website rebuild	Feb 2022 to Nov 2022	On track	This project will develop a modernised website to make it easier for the Australian public to access our radiation health information and engage with our digital services. ARPANSA is engaging with an external vendor and the new website is expected to launch in September 2022. The new website will provide the Australian public with an updated and easy way to access information about radiation and heath and provide digital methods for individuals and agencies to utilise our services and engage with the Agency.
2	Radiation Protection of Patients (RPOP)	Apr 2021 to Jun 2022	Delayed	RPOP is the leading resource for health professionals, patients and public on the safe and effective use of radiation in medicine. The RPOP review will provide an updated online training package along with the associated referrer and patient supporting material. Work on this project has been impacted by COVID-19 as well as external providers and partners/collaborators. Much of the work on the printed material review has been completed, along with the qualitative research component and a review and new case-based module by the Australian College of Rural and Remote Medicine. Staff movements and unavailability has resulted in delays to the surveys and subsequent online module modification.
1	Radiological legacy of nuclear testing – Montebello Islands	Jun 2020 to Dec 2023	Delayed	The Montebello Islands are a unique archipelago off the West Australian coast, due to the combination of their high ecological significance and history as a nuclear testing site. Three fission tests were conducted in the

				 archipelago, which is part of the Montebello/Barrow Islands Marine Park, between 1953-1956. In partnership with a researcher from Edith Cowen University, Western Australia, this 3 year project involving both financial contribution and in-kind support aims to: quantify the current distribution of key anthropogenic radionuclides in the marine ecosystem that may present a risk to the environment identify and assess the extent that natural processes have influenced the fate and behaviour of anthropogenic radionuclides calculate doses for key organisms from the marine trophic web assess the overall radiation risk to marine organisms and human visitors in the Montebello Island region.
				The project has experienced some delays due to staff resourcing and restricted facilities access. Delivery of a sub-set of the samples occurred in June 2022 (previously expected mid-late 2021). The project may require an additional sampling campaign to be undertaken in 2022-2023 which will further impact the timelines for analysis and project completion.
3	Alignment of General Safety Guide (GSG) 12 and 13	Aug 2020 to Dec 2021	Delayed	This project is focussed on aligning the ARPANSA regulatory framework with the best practice as presented by the IAEA guidance GSG-12 (Organization, Management and Staffing of the Regulatory Body for Safety) and GSG-13 (Functions and Processes of the Regulatory Body for Safety). This work will remain ongoing as the project was impacted by the regrettable loss of the Project Manager and regulatory resourcing impacts. A new Project Manager has been appointed and the project is being reassessed.
4	Digital Technology Plan (DTP) Year 4	Sep 2020 to Aug 2022	Delayed	This project involved the implementation of digital technology projects identified in a review of business systems and technology platforms. This has included Microsoft Defender Advanced Threat Protection for servers, Microsoft Teams Telephone Calling, Teams Meeting Rooms, switch refresh in Yallambie and Miranda, high speed networks and internet, as well as an iPad refresh. A number of these projects were impacted by COVID-19 as a result of supplier delays, as well as resource and staff availability. All activities have been completed other than the switch refresh which were impacted by hardware delivery. The final hardware was delivered late June and work is well underway. Completion is anticipated to occur in the first quarter of FY 2022-23.
4	Risk management update	Nov 2020 to Dec 2021	Delayed	This project has been stalled due to the resourcing impacts on the Agency. ARPANSA will continue to enhance our risk management system by introducing dedicated risk management software to improve the oversight of risk, update of the framework and training for staff. With the appointment of the new Director for Risk and Quality this project scope will also be reviewed and updated to meet the evolved requirements, timelines, and outcomes of the scope.
1	ANRDR data assimilation	Nov 2020 to Jul 2022	Delayed	The ANRDR is a database designed to store and maintain radiation dose records for occupationally exposed workers. This project is focussed on developing a tool that can convert dosimetry service provider (DSP) data formats into the ANRDR required format which will facilitate the submission of dose records into the ANRDR. The project is in the final development stages preparing to be delivered. Minor delays are mainly due to technical issues experienced to date; however, these have no implications for the project. DSP's have been actively involved in the project and provided input into the data transfer specifications that have

				been finalised. Completion is anticipated to occur in the first quarter of FY 2022-23.
1	Software developer for ACDS	Apr 2021 to Dec 2023	Delayed	The ACDS has reached a critical stage in maintaining and developing the National Data Set (NDS) which houses the entire Australian and New Zealand clinical audit database. The NDS is currently stored in an Excel spreadsheet and is at risk of corruption, data loss, and errors. Transferring this information into an online database was recognised as an important step towards future proofing this information. The project is behind by 3 months due to reorganisation in the development of the project and the need to perform additional testing. There was also some delay in obtaining approval from the Clinical Advisory Group, to move forward with a new dose reporting methodology which is now being developed and tested.

Regulator performance

In July 2021, the Department of Prime Minister and Cabinet introduced the Commonwealth Regulator Performance Guide (CRPG) (<u>https://deregulation.pmc.gov.au/priorities/regulator-best-practice-and-performance/regulator-</u> <u>performance-guide</u>) which sets out the Government's expectations for regulator performance. The CRPG specifies that it does not apply to Commonwealth entities whose regulatory function is only to regulate Commonwealth agencies or employees. ARPANSA only regulates Commonwealth entities and employees however, to promote best practice and support the implementation of CRPG amongst our stakeholders, ARPANSA assessed its regulatory performance against the CRPG principles of regulatory best practice for FY 2021-22:

- 1. Continuous improvement and building trust.
- 2. Risk based and data driven.
- 3. Collaboration and engagement.

ARPANSA has built trust by actively engaging and seeking stakeholder feedback. Surveys following inspections and assessments indicate high levels of satisfaction with no overall negative feedback received. Feedback has been used to improve the quality and consistency of our service particularly regarding guidance, incident reporting and the publication of performance data on the website. These actions support transparency and build confidence with the public, licence holders and applicants.

The collection and analysis of data is used to improve business intelligence and inform our risk-informed approach to regulation. Findings from this year's data indicates that ARPANSA has had a positive influence on licence holder safety performance and culture for safety. All identified compliance issues have been consistently addressed by licence holders and in most cases where best practice was not observed by ARPANSA, voluntary improvements have been implemented. Our use of data will be further enhanced with the development of a new regulatory administration system in the coming year.

ARPANSA has operated in a challenging operational environment. Its capacity has been tested initially through COVID-19 travel restrictions, a higher-than-normal volume of applications and then by staff vacancies and absences. It has missed targets for the number of inspections undertaken and for the annual review of our inspection prioritisation. The backlog is being addressed through the successful recruitment of vacancies and secondments from other agencies.

ARPANSA has collaborated with other domestic regulators, sharing information and working to reduce unnecessary regulatory burden, including through joint activities. Internationally, ARPANSA is active in IAEA safety standard committees to ensure that Australian interests are considered. ARPANSA initiated regular international meetings with counterparts on approaches relating to human and organisational factors for safety which is a foundation to good safety performance. Several improvements to the regulations on this topic have been developed and are expected to be implemented in legislation in the coming year.

Further details on ARPANSA's assessment of its regulatory performance can be found on the ARPANSA website (<u>www.arpansa.gov.au</u>) including past self-assessments: <u>www.arpansa.gov.au/about-us/corporate-</u> <u>publications/regulator-performance-framework</u>

Financial performance

For the financial year ending 30 June 2022, ARPANSA reported an operating deficit of \$1.381 million. This deficit relates to depreciation and amortisation expenses not requiring appropriation.

Total operating revenue for the year was \$28.523 million and consisted of:

- government appropriation of \$14.967 million
- regulatory license fees and charges of \$5.519 million
- sale of goods and provision of services and other revenue of \$8.037 million.

ARPANSA's total operating expenses were \$29.904 million and consisted of:

- employee benefits of \$18.119 million
- supplier and other expenses of \$8.411 million
- depreciation and amortisation expenses of \$3.374 million.

The Agency will continue to review the efficiency and effectiveness by which it delivers its program, to ensure it operates within available resourcing.

Assets management

The Agency manages non-financial assets totalling \$44.413 million and its asset management strategy emphasises whole-of-life asset management. The capital investment plan is reviewed annually to ensure appropriate prioritisation of building infrastructure and renovation investment and that laboratory equipment purchases and IT infrastructure upgrades meet future research and operational requirements.

Purchasing

The Agency's procurement policies and practices reflect the principles set out in the *Commonwealth Procurement Rules* (CPRs) and focus on encouraging competition, value for money, transparency and accountability as well as the efficient, effective and ethical use of Commonwealth resources. During 2021–22, ARPANSA procurement activities complied with the CPRs.

Consultants

EXPENDITURE ON REPORTABLE CONSULTANCY CONTRACTS

Reportable consultancy contracts 2021-22	Number	Expenditure \$
New contracts entered into during the reporting period	5	309,506
Ongoing contracts entered into during a previous reporting period	5	108,152
Total	10	417,658
Organisations receiving a share of reportable consultancy contract expenditure 2021-22	Expenditure \$	
RMIT University ABN 49781030034	220,000	
Workplace Research Associates Pty Ltd ABN 11083481298	59,977	
Antares Solutions Pty Ltd ABN 55600248066	53,159	
Monash University ABN 12377614012	21,772	
Margaret Donnan ABN Exempt	20,000	

During 2021-22, 5 new reportable consultancy contracts were entered into involving total actual expenditure of \$309,506. In addition, 5 ongoing reportable consultancy contracts were active during the period, involving total actual expenditure of \$108,152.

Decisions to engage consultants during 2021-22 were made in accordance with the PGPA Act and related regulations including the Commonwealth Procurement Rules and relevant internal policies.

ARPANSA engages consultants where there is a requirement for specialist expertise that is not available within the Agency, or where an independent assessment is required. The Agency selects consultants through the use of panel arrangements, by making an open approach to market, or direct engagement of a recognised or pre-eminent expert.

Annual reports contain information about actual expenditure on reportable consultancy contracts. Information on the value of reportable consultancy contracts is available on the AusTender website.

EXPENDITURE ON REPORTABLE NON-CONSULTANCY CONTRACTS

Reportable non-consultancy contracts 2021-22	Number	Expenditure \$
New contracts entered into during the reporting period	88	3,643,094
Ongoing contracts entered into during a previous reporting period	43	4,610,633
Total	131	8,253,727
Organisations receiving a share of reportable non-consultancy contract expenditure 2021-22	Expenditure \$	
Elekta Pty Ltd ABN 49109006966	1,735,209	
Rohde & Schwarz (Australia) Pty Ltd ABN 78002328449	893,836	
Paras and Partners Pty Ltd ABN 20340146881	872,606	
Data#3 Limited ABN 31010545267	498,464	
Labware Australia ABN 56095738426	440,440	

Annual reports contain information about actual expenditure on reportable non-consultancy contracts. Information on the value of reportable non-consultancy contracts is available on the AusTender website.

Procurement initiatives to support small business

ARPANSA supports small business participation in the Commonwealth Government procurement market. Small and Medium Enterprises (SME) and Small Enterprise participation statistics are available on the Department of Finance website, <u>www.finance.gov.au.</u>

ARPANSA's engagement with SMEs is predicated on communicating in clear, simple language and presenting information in an accessible format. ARPANSA's procurement practices support SMEs through the use of the Commonwealth Contracting Suite for low-risk procurements valued under \$200,000.

Advertising and market research

Under Section 311A of the *Commonwealth Electoral Act 1918* ARPANSA is required to disclose details of payments of \$14,500 or more (inclusive of GST) relating to advertising and market research.

During 2021-22, expenditure on media advertising and public notices was below the threshold and ARPANSA did not undertake market research, conduct any advertising campaigns nor purchase any services from creative advertising agencies, polling or direct mail organisations.

ARPANSA resource statement 2021–2022

RESOURCE **S**TATEMENT **2021-22**

	Actual Available Appropriation for 2021-22	Payments Made 2021-22	Balance Remaining 2021-22
	\$'000	\$'000	\$'000
	(a)	(b)	(a)-(b)
Ordinary annual service ¹			
Departmental appropriation			
Prior year departmental appropriation ²	3,304	3,304	-
Departmental appropriation ³	19,500	13,605	5,895
Total	22,804	16,909	5,895
Total ordinary annual services	22,804	16,909	
Other services			
Departmental non-operating			
Equity injection ⁴	-	1,442	(1,442)
Total	-	-	(1,442)
Total other services	-	1,442	
Special account⁵			
Opening balance	1,208		
Appropriation receipt ⁶	18,315		
Non-Appropriation receipts to			
Special accounts	17,606		
Payments made		31,983	
Total Special account	37,165	31,983	5,182
Total resourcing	59,969	50,335	
Less departmental appropriations and equity			
injections drawn from the above	(18,351)	(18,351)	
and credited to special accounts			
Total net resourcing for ARPANSA			

1 Appropriation Act (No.1) 2021-22 and Appropriation Act (No.3) 2021-22.

2 Balance carried forward from previous year for annual appropriations.

3 Includes an amount of \$4.533 million in 2021-22 for Departmental Capital Budget. For accounting purposes this amount has been designated as 'contributions by owners'.

4 Supply Act (No. 2) - Equity Injections 2020-21.

5 Does not include 'Special Public Money' held in accounts like Other Trust Monies accounts (OTM). Services for other Government and Non-Agency Bodies accounts (SOG), or Services for Other Entities and Trust Moneys Special accounts (SOETM).

6 Appropriation receipts from ARPANSA's annual and special appropriations for 2021-22 included above.

ARPANSA expenses for outcome 1

ARPANSA EXPENSES FOR OUTCOME 1

Outcome 1:

Protection of people and the environment through radiation protection and nuclear safety research, policy, advice, codes, standards, services and regulation

	Budget* 2021-22	Actual Expenses 2021-22	Variation 2021-22
	\$'000	\$'000	\$'000
	(a)	(b)	(a)-(b)
Program 1.1: (Radiation protection and nuclear safety)			
Departmental Expense			
Ordinary annual services			
Departmental appropriation ¹	14,967	11,600	3,367
Special Accounts	12,829	15,168	(2,339)
Expenses not requiring appropriation in the Budget year ²	2,863	3,144	(273)
Subtotal for Program 1.1	30,659	29,904	755
Total for Outcome	30,659	29,904	755
	2020-21	2021-22	
Average staffing level (number)	138	132	

* Full year budget including any subsequent adjustment made to the 2021-22 budget at Additional Estimates.

1 Appropriation Act (No.1) 2021-22 and Appropriation Act (No.3) 2021-22.

2 Expenses not requiring appropriation in the budget year are made up of depreciation and amortisation expenses.

Part 4: Management and accountability

Enabling legislation

The ARPANS Act *establishes* the Office of the CEO of ARPANSA. The Act also establishes ARPANSA as a listed noncorporate Commonwealth entity under the *Public Governance, Performance and Accountability Act 2013* (PGPA Act) and a statutory Agency under the *Public Service Act (1999)*.

Corporate governance

The ARPANS Act and the PGPA Act are the foundation of ARPANSA's governance process. Our Corporate Plan is complemented by our internal business plan and governance structure, which facilitates risk informed decision-making, the consistent application of resourcing priorities and the escalation and resolution of issues. Our reporting arrangements ensure section and team activities are aligned with our purpose and efficiently undertaken.

As CEO of ARPANSA, Dr Gillian Hirth is responsible for the Agency's activities, policy directions and efficient performance. ARPANSA's core governance structure includes 3 statutory advisory bodies and 2 senior committees. Our extended governance structure includes internal management committees that support our EG¹ in providing oversight and accountability.

Advisory bodies

The ARPANS Act establishes the Radiation Health and Safety Advisory Council (the Council), the Radiation Health Committee (RHC) and the Nuclear Safety Committee (NSC) to advise the CEO of ARPANSA.

Radiation Health and Safety Advisory Council

The role of the Council, in relation to radiation protection and nuclear safety, is to identify emerging issues; examine matters of major concern to the community; consider the adoption of recommendations, policies, codes and standards; and advise and report to the CEO, at the CEO's request or as Council considers appropriate, on the above and any other matters. During 2021–22, the Council met virtually or in-person on 4 occasions: 4-5 August 2021, 16 December 2021, 3-4 March 2022, and 16 June 2022.

A summary of the issues considered and discussed at Council during 2021–22 can be found in Appendix 2.

¹ The ARPANSA Executive Group comprises our CEO and branch and office heads

Radiation Health Committee

The role of RHC, in relation to radiation protection, is to advise the CEO and the Council; develop policies and prepare draft publications for the promotion of uniform national standards; formulate draft national policies, codes and standards for consideration by the Commonwealth, the States and the Territories; from time to time, to review national policies, codes and standards to ensure that they continue to substantially reflect world best practice; and consult publicly in the development and review of such policies, codes and standards. During 2021-22, the RHC met on 4 occasions: 11 October 2021, 10 December 2021, 11 March 2022 and 26 May 2022.

A summary of the issues considered and discussed at RHC during 2021–22 can be found in Appendix 2.

Nuclear Safety Committee

The role of NSC, in relation to nuclear safety and the safety of controlled facilities, is to report to and advise the CEO and the council; review and assess the effectiveness of standards, codes, practices and procedures; develop detailed policies and to prepare draft publications for the promotion of uniform national standards; and advise the CEO and the Council, or at the CEO's request report on the above matters. During 2021–22, the NSC met virtually or in-person on 3 occasions: 26 November 2021, 25 February 2022 and 10 June 2022. A summary of the issues considered and discussed at NSC during 2021–2022 can be found in Appendix 2.

Senior committees

Audit and Risk Committee

The PGPA Act requires Commonwealth entities to establish an audit committee. ARPANSA's Audit and Risk Committee (ARC) provides independent assurance and advice to the CEO on the Agency's financial reporting, performance reporting, system of risk oversight and management, and system of internal control.

During 2021-22, the ARC met on 5 occasions.

The ARC charter can be viewed on the ARPANSA website at: <u>www.arpansa.gov.au/about-us/corporate-publications/audit-and-risk-committee.</u>

Member name	Qualifications, knowledge, skills or experience	Number of meetings attended/total number of meetings	Total annual remuneration	
Margaret Donnan	Master of Science (Chemistry)	5 attended total	\$4,000 per meeting	
	Bachelor of Science	Current Committee	total to date of	
	Associate Fellow of Institution of Chemical Engineers	Member: Appointment commenced 2021	\$20,000	
	Member Australian Institute of Company Directors			
Leanne Heywood	Bachelor of Business (Accounting)	5 attended total	\$2,000 per meeting	
	Certified Practising Accountant		total to date of	
	Master of Business Administration	Current Committee	\$10,000	
	Graduate AICD International Company Director's Course	Member: Appointment commenced 2021		
		Resigned 2022 Last meeting May 2022		
Claire Miller	Bachelor of Laws	5 attended total	\$2,000 per meeting	
	Bachelor of Arts		total to date of \$10,000	
	Graduate Diploma of Applied Corporate Governance	Current Committee Member: Appointment		
	Associate Member of Governance Institute of Australia	commenced 2021		
	Member Australian Institute of Company Directors			
	Member Association of Corporate Counsel Australia			
Dennis Clark	Bachelor of Economics	4 attended total	\$2,000 per meeting	
	Company Directors Diploma		total to date of	
	Fellow Governance Institute of Australia	Current Committee	\$8,000	
	Fellow Australian Institute of Company Directors	Member: Appointment commenced 2021		
	Fellow Chartered Accountant			
	Fellow Certified Practicing Accountant			
	Member Institute of Internal Auditors Australia			

Audit and Risk Committee members

Strategic Management Committee

The Strategic Management Committee (SMC) considers the threats and opportunities that may influence the strategic direction of the Agency and contributes at key times throughout the year to ARPANSA's planning and performance framework. The SMC met 2 times in 2021–2022 and comprises the CEO (Chair), branch and office heads, and 2 external members appointed by the CEO.

Management committees

ARPANSA ensures effective decision-making, management and oversight of the Agency's operations and performance through the following management committees.

Executive Group

The EG is ARPANSA's operational management forum and comprises the CEO, and branch and office heads. The EG is responsible for monitoring the strategies and initiatives used to implement Agency business plans. The EG met 13 times in 2021–22.

Work Health and Safety Committee

The Work Health and Safety (WHS) Committee assists the Agency to review and update measures used to protect the health and safety of workers. Members of the committee assist in developing procedures and instructions relating to health and safety, and their participation sets the standard for safety culture at ARPANSA.

The WHS Committee provides the Agency with a consultative mechanism that enables management and worker contributions to WHS improvements across all operations. The WHS Committee comprises the CEO (Chair), Health and Safety Representatives, management representatives, and the WHS Advisor/Radiation Safety Officer. Other subject matter experts may participate in meetings as required. The WHS Committee met 6 times in 2021–22.

The Radiation Safety Committee

The Radiation Safety Committee (RSC) is a sub-committee of the WHS Committee and provides support to the Radiation Safety Officer in reviewing and updating the plans and arrangements that guide the safe use of the radiation sources and facilities used to support ARPANSA's research, service delivery and projects.

The RSC monitors, reviews, and improves radiation safety practices within ARPANSA. It is chaired by the Radiation Safety Officer and involves Radiation Protection Advisors from across the Agency. It works closely with the WHS Advisor, the Quality Manager and the WHS Committee. The Radiation Safety Committee met 5 times in 2021–22.

Agency Security Group

The Agency Security Group (ASG) oversees the development and implementation of the protective security program across ARPANSA to ensure our policies, procedures and practices comply with the Commonwealth's Protective Security Policy Framework; Information Security Manual and promotes a positive security culture integrated into all aspects of ARPANSA's business. The ASG met 7 times in 2021–2022, and comprises the Chief Security Officer (Chair), the Chief Information Security Officer, the Agency Security Adviser, the Chief Information Officer, the Information Technology Security Adviser, the alternate Agency Security Advisor and the Facilities Manager. Other subject matter experts may participate in meetings as required.

Project Management Advisory Group

ARPANSA's Project Management Advisory Group (PMAG) is centralised project coordination function led by the Governance and Strategic Partnerships team. The primary purpose of ARPANSA's PMAG is to provide a proactive, centralised consultation mechanism for project managers at the early stages of project development.

PMAG works to achieve internal business alignment of projects with ARPANSA's strategic and BAU priorities by ensuring impacted/implicated functional areas have a collaborative platform to provide advice.

The group involves representation from the business support areas (e.g., Facilities, Security, Risk) to ensure key functions have visibility to support upcoming projects, and the opportunity to provide constructive feedback.

Staff Consultative Forum

ARPANSA's enterprise agreement provides for a Staff Consultative Forum (SCF) as the key employee consultative body. The SCF comprises the CEO, 9 employees elected by staff (one of which is the Chair) and a representative from each of the unions supporting ARPANSA staff. The SCF met on 6 occasions in 2021–22 to discuss issues relating to management of the Agency and impacts to staff.

Digital Information Advisory Group

The primary purpose of the Digital Information Advisory Group is to achieve Agency-wide information and technology governance and is responsible for the management of Agency information, technology and data, including the coordination of Agency information and data management frameworks, strategies and policies.

The advisory group is guided by the 'Building trust in the public record: managing information and data for government and community policy', and the actions associated that must be undertaken to meet the requirements set by National Archives Australia. The group met on 2 occasions in 2021-2022.

Accountability and risk management

ARPANSA ensures effective accountability and risk management through the following:

Accountable authority

Under the PGPA Act the CEO of ARPANSA is the accountable authority during this reporting period. The CEO discharges their governance obligations through their involvement in ARPANSA's planning, performance reporting and risk management activities.

Planning

ARPANSA has an integrated planning, budgeting and performance reporting process that supports the alignment of Agency-wide initiatives against our key activities. Our planning examines the interdependencies within our Agency stakeholder and our operating environment and evaluates how our resources will be prioritised to meet our purpose. Our annual planning cycle: informed by risk, strives to align our strategic priorities, operational activities, resource allocation and performance measures.

Performance reporting

ARPANSA's performance structure has been established to ensure transparency, clarity and accountability in how we assess our progress towards achieving our purpose. To assist us in achieving our purpose, ARPANSA has identified our Key Activities, representing our significant areas of work that contribute to delivering radiation protection and nuclear safety outcomes to the Australian community. To ensure all strategic Agency initiatives contribute to achieving our purpose we have also integrated:

- PBS measures to provide greater context and correlation between Agency's planning documents.
- Projects that demonstrate how our operational and strategic priorities align with our purpose.

In line with Agency governance processes, all performance information and projects, as outlined in our Corporate Plan, will be monitored and reported to our EG and the Audit and Risk Committee (ARC).

ARPANSA produces quarterly internal reports on non-financial performance. These reports are presented to the EG and the ARC shortly after the end of each quarter.

Financial performance is reported separately through monthly internal financial reports to the EG and to the ARC shortly after the end of each quarter.

The annual report comprises information about the non-financial and financial performance of the Agency during the reporting period. Its analysis and publication communicate the details of the agencies activities and results to help the public and parliament assess if the Agency has achieved its purpose.

Several other mechanisms assist management to monitor performance in a wider context:

- The ARC requires management to regularly provide evidence of performance against the mandatory elements of the PGPA Act and other relevant legislation.
- ARPANSA's strategic internal audit program, informed by risk and overseen by the ARC, is focused on compliance performance and systems of internal control.
- ARPANSA's internal quality audit program (which maintains ISO/IEC 17025 certification for our laboratories) monitors operational performance against the requirements of the relevant standards captured in the documented ARPANSA management system.

Risk management

ARPANSA has a Risk Management Framework (RMF) that aligns responsibility and accountability for risk across the Agency. Risk management is integrated into our business planning processes, which enables effective identification and management of risks that could impact on the Agency achieving its outcomes or otherwise cause it harm. ARPANSA's RMF aligns with broader requirements such as the Commonwealth Risk Management Policy and the international standard on risk management (ISO 31000) and meets the requirements of section 16 of the PGPA Act.

In 2021, ARPANSA achieved an 'established' level of maturity in the most recent Comcover Risk Management Benchmarking Survey compared to 'advanced' in 2019. This result further highlighted the need to improve ARPANSA's risk maturity, which will be addressed in a risk management project to upgrade the RMF.

Audit and fraud control

ARPANSA has in place rigorous internal and external audit programs. The internal audits are performed as outlined below. The external audits and certification are undertaken by the Australian National Audit Office (ANAO) and the National Association of Testing of Authorities (NATA). NATA conducts ARPANSA's certification audits to ISO/IEC 17025 competency-based certification every 18 months.

Internal strategic audit program

A new strategic internal plan has been developed and is ready for implementation to the Agency. The new plan is aligned with the new Agency strategic risks and corporate plan. This plan will run for 12 months from July 2021 to June 2022. The program is now also aligned with the ARPANSA strategic meetings and financial year.

Internal quality audit program

ARPANSA's internal audit program is scheduled per calendar year in advance. This year a decision was made to align the internal quality audit program to the fiscal year. The planning and scheduling of audits is based on the previous year's performance, and a risk-based logic is applied to calculate the potential future risk of the audited areas. Internal inputs (e.g., management review meetings and previous audit findings) and external factors (e.g., external audits and regulatory inspections) are captured within this risk calculation.

On a number of occasions during 2021–22, ARPANSA staff in both Melbourne and Sydney were required to work from home due to lockdowns or stay-at-home orders as part of COVID-19 mitigation control strategies and government directions. During those periods where staff were not able to attend the office on-site, internal audits were conducted remotely. Where audits were unable to be performed remotely, they were rescheduled.

Significant non-compliance issues

During this period ARPANSA commenced two NATA Audits.

One audit is the periodic surveillance audit, this audit covered the following areas of ARPANSA:

- PSDL
- ACDS
- UVR Services
- Radiofrequency Calibration Services.

ARPANSA is expecting NATA to provide the audit report in November 2022. NATA have not notified ARPANSA of any issues identified at this stage of the audit.

The second audit from NATA is the 3-yearly recertification audit. This audit was commenced and completed on 14 June 2022. As a result, a number of Major and Minor Non-conformances were identified along with a number of Observations:

- 7 Major Non-conformances identified
- 2 Minor Non-conformances identified
- 7 Observations identified of which one is a positive observation.

ARPANSA has started to implement actions to address the non-conformances and the observations identified by NATA during this recertification audit.

Fraud minimisation strategies

During 2021–22, the Agency maintained a rolling program to assess fraud risks embedded within ARPANSA's overarching risk management framework. Treatment strategies were developed and monitored as part of that process in compliance with section 10 of the PGPA Rule. Results of the fraud risk assessment process are used to inform the development of the internal audit schedule.

No instances of fraud were identified during 2021–22.

Work health and safety

ARPANSA strives to achieve an agile health and safety system that can respond to changes in the health and safety landscape and challenges such as COVID-19. ARPANSA is committed to continuous improvement such as uplifting our WHS management system to better align to ISO45001 and the relevant codes and standards this uplift has with a focus on the interaction between technology, and human and organisational factors to reduce relative risk.

The COVID-19 pandemic response required dedicated resources to ensure plans, procedures, training and supplies were in place that would allow the Agency to maintain a COVID Safe workplace. Regular and personal contact with staff using collaborative platforms was established allowing any mental health concerns to be handled quickly and sensitively.

Work health and safety initiatives

WHS initiatives for 2021 focused on improved chemical management within the Agency as a whole. This has involved a site review of the ARPANSA chemical risk, and development of specific chemical risk mitigation process and handling procedures. In addition, there is an ongoing review of the ARPANSA working from home workstation compliance which enable the Agency to ensure our workers have WHS approved ergonomic workstations at home. WHS has also spearheaded Agency-wide wellness initiatives in the workplace which are designed to promote inclusion in the office and encourage working from the offices.

During 2021-2022, ARPANSA maintained its COVID-19 safe plan for both sites. The plans proved very effective with minimal workplace transmissions. As part of our COVID-19 response, our COVID-19 officers would contact employees who contracted COVID-19 (not limited to workplace exposures) and perform welfare checks to ensure they had the adequate support needed, which was important as a number of staff live alone. During the year we further promoted mental health via a series of video presentations and interactive meetings from our Employee Assistance Program (EAP) provider and WHS team. We also continued to encourage vaccination among our staff members, including the flu vaccination.

Strengthening our WHS management systems remains ARPANSA's priority, and several initiatives were undertaken throughout 2021–22 to support continuous improvement including reviewing hazard and incident reporting processes.

Hazard and incident reporting

Hazard and incident reporting throughout the year occurs at regular intervals through the monthly EG meetings, and on occasion outside of these meetings. WHS has started a transition from traditional paper-based reporting mechanisms to a semi-automated electronic system. This system is currently in a trial phase with the expectation to roll out to the Agency in 2023. With greater attention being placed on incident reporting, ARPANSA has seen an increase in injury rate amongst our workers, when compared to last year. This was an anticipated outcome as staff commenced their return to the office and greater awareness of reporting requirements and processes was provided. Both factors are typical correlations associated with an increase in incident and injury reporting.

Workers' compensation

There were no workers compensation claims made during FY 2021–22.

Investigations or notices given

WHS investigations and notices under Part 10 of the Work Health and Safety Act 2011

There were no new Comcare notifiable incidents during FY 2021-2022.

In December 2021, a Prohibition and an Improvement notice were issued by Comcare in relation to an incident that occurred in the 2020-2021 reporting period. The Prohibition and Improvement notice were closed in April of 2022. Currently ARPANSA has an active investigation with Comcare, and work is currently underway to complete this action.

Radiation and Nuclear Safety – ARPANS Act

During 2021–2022, there was one incident that was self-reported to the regulator and reported to Parliament in accordance with subsections 59(3) and 60(3) of the *ARPANS Act*. During an upgrade to the Agency's research medical linac, ARPANSA did not obtain the prior approval of the CEO of ARPANSA to make a change that had significant implications for safety.

Further information is available in Appendix 1.

External scrutiny

Judicial review

During 2021–22, the Agency was not involved in any matters before the Federal Court, the Full Federal Court or the Administrative Appeals Tribunal.

Reports by the Auditor-General, Parliamentary Committees or Commonwealth Ombudsman

ARPANSA was not the subject of any audits undertaken by the Auditor-General during the year 2021–22. As at 30 June 2022, no reports were made by Parliamentary Committees regarding ARPANSA for the year 2021–22. During 2021–22, there were no complaints made to the Commonwealth Ombudsman against the Agency. There were no earlier complaints that remained open.

Freedom of Information

Agencies subject to the *Freedom of Information Act 1982* (FOI Act) are required to publish information to the public as part of the Information Publication Scheme. Each Agency must display on its website a plan showing what information it publishes in accordance with the Information Publication Scheme requirements. ARPANSA, as an Australian Government Agency, is subject to the FOI Act and is required to comply with the Information Publication Scheme provisions. ARPANSA has developed an Agency plan describing ARPANSA's compliance with Information Publication Scheme provisions as required by section 8(1) of the FOI Act. The plan is available on the ARPANSA website at: www.arpansa.gov.au/about-us/accessing-our-information/information-publication-scheme-Agency-plan.

Feedback on this plan can be provided by contacting the FOI and Privacy Officer at:

The FOI and Privacy Officer ARPANSA

PO Box 655 MIRANDA NSW 1490 foi@arpansa.gov.au 03 9433 2211

Documents released by ARPANSA in response to FOI requests can be found on the disclosure log at: www.arpansa.gov.au/about-us/accessing-our-information/disclosure-log.

Statistics

ARPANSA received 3 FOI requests during the reporting period of which one resulted in full release, one in partial release and in one case the requested documents were found to not exist.

Other management issues

Property and Engineering

ARPANSA's Facilities and Engineering (F&E) team are responsible for facilities maintenance of the building and external grounds of the owned premises at Yallambie, Victoria, in addition to the rented office premise in Miranda, New South Wales. The team provides a combination of Facilities Management, Engineering Services, Stores/Purchasing and Administration services to the Agency. F&E also provides ongoing facilities support across a range of projects where construction works form part of a broader technology project or building improvement implementation to ensure adherence to building compliance standards.

Environment and Sustainability

- The F&E team, work with a focus on continual improvement in all areas, including environmental management. Capital investments in energy efficiency projects over the past 4-year period generated the creation of 1,498 Victorian Energy Efficiency Certificates (VEEC's) which were sold on the VEEC spot market last July for a total of \$73,402 plus GST.
- In addition, we continue to review opportunities including replacement of ageing infrastructure such as fluorescent lighting with energy efficient LED lighting. Approximately 10% of all lighting on the site was replaced in the past financial year, with around 60% now having been completed in the past 4 years.

ARPANSA's Team Green

Team Green is ARPANSA's employee led group that coordinates some of the staff-led environmental initiatives, as well as promoting environmentally responsible and sustainability-focused practices. This financial year, the group has instigated the following initiatives.

COMPOSTABLE MAILERS

A collaborative project between ARPANSA's Team Green and the Personal Radiation Monitoring Section (PRMS) has worked on reducing the plastic waste which results from the monitoring process. Our first success story is that the plastic sleeves used to protect our Neutron monitors are now recycled on their return to ARPANSA. Progress has also been made to swap the plastic padded post bags used to send monitors out to customers to fully compostable parcels. PRMS send out hundreds of these parcels each week, representing a significant reduction in plastic waste used.

RECYCLING AWARENESS

Team Green has developed new posters to encourage staff to recycle both at home and in the office, through the provision of recycling options for items such as mobile phones, toothpaste and spectacles.

In addition to battery recycling stations and small electronics recycling systems, printer cartridge recycling at our Yallambie site commenced, with employees encouraged to bring in their printer cartridges from home for disposal.

REPURPOSING TEXTILES

Steps have been taken to reduce waste from UVR testing fabric samples going to landfill by offering it for art and craft projects.

Human resources

ARPANSA staff have deep expertise across radiation protection, nuclear safety, and enabling services. They are largely highly qualified long-standing employees, with deep commitment to our mission and objectives. Our culture is characterised by a commitment to ARPANSA's mission, and our staff demonstrate continued strong levels of engagement in the work we do and the opportunities to build expertise that working at ARPANSA provides. The APS Census 2021 revealed that a significant majority of staff believe strongly in the purpose and objectives of our Agency, strongly feel their immediate supervisor cares about their health and wellbeing and are happy to go the extra mile when required. Staff are also looking for improvements to change management and consultation processes and seeing senior leadership working as a team and effectively articulating strategic direction and priorities. Our staff are keen to build their capabilities and maximise the window of opportunity to work with staff who are planning to retire, to maximise knowledge sharing and implement activities to sustain the domain expertise in the critical areas required to meet expanding capability commitments, stakeholder expectations and Australian Government expectations.

ARPANSA's Workforce Strategy

ARPANSA has developed a Workforce Strategy 2022-25, which takes a whole of enterprise view, and identifies the priorities for shaping our workforce to respond to immediate and emerging challenges. It sets out the workforce implications of current drivers and the key activities that will address talent gaps and enable the sustainable capability central to our capacity for impactful delivery and influential leadership. It outlines a workforce management capability that will support execution of our medium and long-term organisational strategy.

The purpose of the Workforce Strategy is to enable ARPANSA to carry out its functions and achieve its objective through its people. The measurable outcomes the Agency seeks to realise from implementation of the Workforce Strategy are:

- sustainable capability: the right people with the right capabilities, experience and knowledge in the right roles delivering continuity of service to internal and external stakeholders
- employer of choice: an improved employee experience that attracts, retains and engages expert and high performing people
- strategic alignment: clear line of sight between our roles and ARPANSA's purpose.

Attraction and recruitment

The ARPANSA attraction and recruitment process is based on the APS principles of merit, fairness and transparency. During COVID-19 restrictions, ARPANSA continued to recruit, and adapted our recruitment processes to support both in person and virtual interviewing.

During the 2021–22 reporting period, ARPANSA ran 33 external recruitment campaigns for 16 executive level (EL) positions, 16 APS positions and one SES position. The campaigns attracted 232 total applicants and resulted in 30 new starters, 4 internal transfers, 5 internal promotions, and 3 roles with no suitable candidates, compared to the previous financial year which included 17 external campaigns attracting 395 applicants and resulting in 8 new starters, one internal transfer and 5 internal promotions.

Employment arrangements

As at 30 June 2022, ARPANSA employed 125 ongoing and 5 non-ongoing employees, and one statutory office holder (1.0 FTE). ARPANSA also employs staff on an irregular or intermittent basis to support the delivery of our objectives. Our total number of employees remained within the average staffing level. All ARPANSA employees are engaged under the *Public Service Act 1999*.

The ARPANSA Enterprise Agreement 2017–2020 (the Agreement) will remain in operation for a further one-year period as part of a determination under section 24(1) of the *Public Service Act 1999*. The Agreement outlines the terms and conditions of employment for non-senior executive service (SES) staff. The Agreement contains an individual flexibility arrangement term, which enables the Agency to vary the operation of specified terms and conditions, provided under the Agreement, for individual non-SES staff where necessary and appropriate. As at 30 June 2022, 16 such arrangements were in place.

Non-salary benefits

Under its enterprise agreement and common law contracts, ARPANSA staff are able to seek access to a range of non-salary benefits including:

- flexible working arrangements, including flex time (APS levels 1 to 6 only), job-sharing, part-time, timeshifted and hybrid work arrangements
- generous parental/maternity leave provisions
- generous range of paid and unpaid leave options
- study assistance
- salary packaging for cars and superannuation, with fringe benefits tax (FBT) applicable
- free, confidential 24/7 counselling through an employee assistance program.

Executive remuneration

ARPANSA's CEO is responsible for determining the remuneration policy and the remuneration structure for senior executives.

As a non-corporate Commonwealth entity, ARPANSA has the following categories of officials covered by the executive remuneration disclosures:

- Key management personnel this includes the CEO
- Senior executives branch and office heads who are responsible for making decisions, or having substantial input into decisions, that affect the operations of the Agency.

ARPANSA does not have any other officials who are key management personnel or senior executives or whose total remuneration exceeds the threshold amount (\$235,001) for the reporting period.

Remuneration governance arrangements

ARPANSA's framework for determining remuneration is set out in the ARPANSA Enterprise Agreement 2017–2020 and the *Remuneration Tribunal Act 1973*. The employment instruments for determining remuneration for the different categories of ARPANSA officials include:

- The CEO is remunerated under the Remuneration Tribunal (Remuneration and Allowances for Holders of Full-time Public Office) Determination 2022
- Senior executives are remunerated through a common law contract of employment, or under Annex 1 of the ARPANSA Enterprise Agreement where Clause 32 is applied to provide additional remuneration benefits under an individual flexibility arrangement.

ARPANSA's remuneration policy and practices are linked to the achievement of the Agency's objectives and performance. Officials' salaries only increase, generally, on an annual basis as part of a performance review process.

Executive remuneration information

EXECUTIVE REMUNERATION INFORMATION FOR THE **2021–22** REPORTING PERIOD

		Short-term benefits			Post- employment benefits	Other long-term benefits		Termination benefits	Total remuneration
Name	Position title	Base salary	Bonuses	Other benefits and allowances	Superannuation contributions	Long service leave	Other long-term benefits		
Carl-Magnus Larsson ¹	Chief Executive Officer	\$203,928	0	\$48,737	\$31,770	\$5,239	0	0	\$289,674
Gillian Hirth ²	Chief Executive Officer	\$93,465	0	\$16,796	\$13,223	\$1,792	0	0	\$125,276
Gillian Hirth ¹	Chief Radiation Health Scientist	\$131,933	0	\$26,413	\$28,346	\$3,894	0	0	\$190,586
Rick Tinker ³	Chief Radiation Health Scientist	\$54,471	0	0	\$7,059	\$1,148	0	0	\$62,678
Ivan Williams	Chief Medical Radiation Scientist	\$200,609	0	\$25,304	\$30,359	\$4,976	0	0	\$261,248
Jim Scott	Chief Regulatory Officer	\$183,779	0	\$25,337	\$36,714	\$4,893	0	0	\$250,724
Tone Doyle	Office Head and Chief of Staff	\$59,264	0	\$63,309	\$28,386	\$4,831	0	0	\$155,791
Martin Reynolds	General Counsel	\$169,622	0	\$52,499	\$29,551	\$4,831	0	0	\$256,503
Niraj Pau	Office Head and Chief Financial Officer	\$168,354	0	\$58,168	\$29,317	\$4,976	0	0	\$260,816

1 part-year until 21 March 2022.

2 part-year from 22 March 2022.

3 part-year from 28 March 2022.

Learning and knowledge sharing

ARPANSA staff have access to learning and development programs that support them in developing and refining skills critical to succeed in both their current and future roles within the Agency. Learning activities set out to:

- enable the capability, productivity and performance required to achieve ARPANSA's strategic objectives
- enable high quality, purposeful and application-ready learning and knowledge sharing experiences
- leverage a wide range of leading practice learning and knowledge sharing methodologies.

ARPANSA's online learning management system, LearnHub, is a key learning resource for all staff and is supplemented by face-to-face or virtual training.

Development of expertise and capability is an identified priority in ARPANSA's Workforce Strategy 2022-25. The objective of the expertise and capability priority is to enable ARPANSA to build and share knowledge and skills to enable sustainable delivery and provide career and mobility opportunities. The work packages to be delivered include:

- graduate program
- knowledge management approach and knowledge sharing initiatives
- manager development
- organisation-wide learning initiatives
- mentoring
- mobility initiatives.

Diversity and inclusion

ARPANSA is committed to providing staff with an increasingly diverse organisation, where we each feel that we belong within an environment where we can do our best work, and a culture that enables us to bring our unique and best selves to work. ARPANSA recognises that a diverse and inclusive workforce improves the workplace experience of staff and enhances our interactions with our clients and each other. It builds organisational capability by bringing a diversity of approaches to the way we collaborate, brought about by having a broader spectrum of perspectives, and greater empathy and connection with each other.

ARPANSA's Diversity, Equality and Inclusion Plan 2022-25 sets out 5 areas of focus and a range of initiatives, awareness raising events and networks to deliver on our commitment. Accountability is a sixth area of focus and enables us to track our progress and maintain our reputation as an inclusive employer. Each focus area has a champion, target outcomes that aim to achieve real change, and measures that quantify progress on change realisation. The 5 areas of focus are First Nations peoples, Gender equality, LGBTQIA+, Cultural and linguistic diversity, and Ability and neurodiversity.

Disability reporting mechanisms

Since 1994, non-corporate Commonwealth entities have reported on their performance as policy adviser, purchaser, employer, regulator and provider under the Commonwealth Disability Strategy. In 2007–08, reporting on the employer role was transferred to the Australian Public Service Commission's State of the Service reports and the APS Statistical Bulletin. These reports are available at <u>www.apsc.gov.au</u>. Entities have no longer been required to report on these functions. ARPANSA's Workforce Strategy outlines objectives to review recruitment processes and remove barriers to hiring candidates with disability. In 2021–22, ARPANSA has supported people to apply for jobs through use of an inclusive recruitment statement and use of the RecruitAbility scheme.

Wellbeing

ARPANSA has not been immune to the acceleration in volume of change events, and the varying impacts of those events. The current drivers and the last 2 years of our personal and professional responses to COVID-19 related change have demonstrated not only our strengths, but also areas where ARPANSA can supplement support to the well-being of individuals and organisation-wide.

Staff have broadly welcomed the approach to co-design change implementation and communication in a wide set of contexts to improve our change communications and processes, acknowledging that well-managed change is an input to wellbeing. There are a wide range of inputs to this priority, including organisational policies and procedures, inclusion practices, access to services and support, and the skills of individuals to reframe challenging circumstances and regulate emotional responses. While we have experienced some benefits in working from home, the past 2 years have highlighted how valuable in-person interactions are to meaningful workplace relationships, productive collaboration and engagement with our culture. There are also points of integration with workplace safety and security, our commitments under the Workplace Health and Safety Act, Safety, Rehabilitation and Compensation Act, and Protective Security Policy Framework.

ARPANSA's Workforce Strategy includes a priority of change, health and wellbeing. The objective of the change, health and wellbeing priority is to enable ARPANSA to involve staff in change processes and communications and support staff health and wellbeing.

APS census

The APS Employee Census (the Census) is an annual employee perception survey of ARPANSA's workforce. ARPANSA's Census 2021 revealed that a significant majority of staff strongly believe in the purpose and objectives of our Agency, strongly feel their immediate supervisor cares about their health and wellbeing and are happy to go the extra mile when required. Staff are also looking for improvements to change management and consultation processes and seeing senior leadership working as a team and effectively articulating strategic direction and priorities. Our staff are keen to build their capabilities and maximise the window of opportunity to work with staff who are planning to retire, to maximise knowledge sharing and implement activities to sustain the domain expertise in the critical areas required to meet expanding capability commitments, stakeholder expectations and Australian Government expectations.

Key areas for focus, which informed the development of ARPANSA's Workforce Strategy, included supporting innovative thinking, recognition of performance, an inclusive workplace, respectful behaviour, and internal communication particularly in relation to change.

Performance and development

ARPANSA's performance and development system (APDS) has been designed to support employees and supervisors with setting actionable milestones and identifying development areas to support staff in their roles. Conversations about goal setting and development are a vital ingredient in cultivating a high performing workplace culture. The objectives of the APDS provide opportunities for employees to identify the performance needed to meet ARPANSA's objectives and, in conjunction with their managers, develop appropriate skills, knowledge and expertise to address those needs.

ARPANSA supports employees to achieve effective performance by ensuring that ARPANSA:

- continues to build the capability necessary to achieve the outcomes expected by Government
- continues to improve employees understanding of their work responsibilities and the performance and ethical standards expected of them
- continues to ensure that employees discuss and understand how their performance is measured against the agreed objectives
- continues to improve communication and facilitate structured and constructive feedback mechanisms between managers and their employees
- has fair and open performance management processes and practices that support a culture of high performance, in which all performance is effectively managed
- requires employees to participate constructively in ARPANSA's performance management system; that is ARPANSA's APDS
- invests in building the capability of managers to manage performance effectively
- uses its APDS processes to guide salary movement.

APDS payment

Clause 42.6 of ARPANSA's Enterprise Agreement states that employees will be entitled to an annual bonus of \$300.00 in recognition of their participation in the APDS. Payment is conditional upon 90% of employees covered by the Enterprise Agreement having completed an APDS agreement with the review finalised immediately after the financial year. This requirement was met for the reporting period.

Performance pay

There is no provision for the payment of performance pay in ARPANSA's Enterprise Agreement or common law contracts.

ARPANSA Award

The ARPANSA Award was first launched in 2001 and has since become an annual tradition of recognition and celebration of the significant contributions to the work of ARPANSA by individuals and teams. The following categories are recognised:

- an outstanding and exceptional achievement or success
- outstanding service to internal or external stakeholders
- an outstanding initiative which has been implemented
- significant improvements to work procedures or operations systems
- an exceptional initiative or achievement involving cross-unit cooperation
- outstanding contributions to enhancing client experience
- exemplary professionalism and upholding the APS Code of Conduct and Values when interacting with clients and stakeholders.

The 2021 ARPANSA Award was awarded to ARPANSA's COVID-19 incident response team in recognition of their contribution to the Agency's COVID-19 response and to two individuals for achievements in safety systems and work health and safety management.

High achievement certificates were awarded to:

- the lead researcher responsible for streamlining the film dosimetry analysis process and implementation into ACDS practice
- PSDL Senior Radiation Scientist for contributions to radiation metrology in Australia
- ARPANSA's Creative Designer Digital and Brand for an exceptional contribution to ACDS publishing and branding
- PRMS Administrative Support Officer for commitment to providing great service to customers and the Agency.

Staffing statistics

As at 30 June 2022 ARPANSA employed 130 ongoing and non-ongoing staff (not including the CEO or casual staff). No employee identified themselves as indigenous.

Table 3.1 sets out the salary ranges as at 30 June 2022.

Table 3.2 sets out employees by location, gender and APS classification. The table shows that 85% of staff are located in the Victorian office.

Table 3.3 shows that of the 130 employees (not including the CEO or casual staff), 125 are ongoing and 5 are nonongoing. 6 ongoing staff are part-time and 1 non-ongoing employee is part time.

Table 3.4 shows that as at 30 June 2022 Radiation Health Services is the largest branch with 44 staff, followed by the Office of Business Support (28), Medical Radiation Services (21), Regulatory Services (21), Office the CEO (14) and Office of the General Counsel (2).

Salary ranges by classification level as at 30 June 2022

APS Classification	Salary Range (\$)
ARPANSA Graduate	64,609 – 72,292
APS Level 1	48,466 - 55,090
APS Level 2	56,742 - 62,291
APS Level 3	64,609 – 72,292
APS Level 4	74,461 – 77,809
APS Level 5	80,144 - 84,147
APS Level 6	86,671 - 99,137
Executive Level 1	107,072 - 123,196
Executive Level 2 lower	130,834 - 148,574
Executive Level 2 upper	154,516 - 165,959

$Salary\, \text{ranges}\, \text{by}\, \text{classification}\, \text{as}\, \text{at}\, 30\, \text{June}\, 2022$

	SE	ES	EL	. 2	EL	. 1	AP	S 6	AP	S 5	AP	S 4	AP	S 3	AP	S 2	AP	S 1	Grad	uate	То	tal
Classification	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022
New South Wales																						
Female	0	0	0	0	4	4	1	0	0	0	3	3	0	0	0	0	0	0	0	0	8	7
Male	1	1	4	5	7	5	1	1	1	1	0	0	0	0	0	0	0	0	0	0	14	13
Total	1	1	4	5	11	9	2	1	1	1	3	3	0	0	0	0	0	0	0	0	22	20
Victoria																						
Female	1	0	6	5	10	12	13	14	9	7	3	2	8	9	3	3	0	0	0	0	53	52
Male	1	2	10	10	21	22	19	18	6	4	0	0	2	2	0	0	0	0	0	0	59	58
Total	2	2	16	15	31	34	32	32	15	11	3	2	10	0	3	3	0	0	0	0	112	99
Total	fotal																					
Female	1	0	6	5	14	16	14	14	9	7	6	5	8	9	3	3	0	0	0	0	61	59
Male	2	3	14	15	28	27	20	19	7	5	0	0	2	2	0	0	0	0	0	0	73	71
Total	3	3	20	20	42	43	34	33	16	12	6	5	10	11	3	3	0	0	0	0	134	130

Staff by location, gender and APS classification

Distribution of staff by full or part-time status

	Full-time Ongoing		Full-time N	on-ongoing	Part-time	Ongoing	Part-time N	on-ongoing	То	tal
	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022
Female	54	50	2	4	4	5	1	1	61	60
Male	70	69	1	0	2	1	0	0	73	70
Total	124	119	3	4	6	6	1	1	134	130

Distribution of staff by branch/office

	Ongoing	Non-ongoing	Ongoing	Non-ongoing	Ongoing	Non-ongoing	
Branch	Female		Ма	ale	Total		
Office of the CEO	6	1	7	0	13	1	
Office of the General Counsel	0	0	2	0	2	0	
Medical Radiation Services Branch	4	2	15	0	19	2	
Radiation Health Services Branch	20	1	22	1	42	2	
Regulatory Services Branch	7	0	14	0	21	0	
Office of Business Support	18	0	10	0	28	0	
Total	55	4	70	1	125	5	

Part 5: Financial statements





INDEPENDENT AUDITOR'S REPORT

To the Assistant Minister for Health and Aged Care

Opinion

In my opinion, the financial statements of the Australian Radiation Protection and Nuclear Safety Agency (the Entity) for the year ended 30 June 2022:

- (a) comply with Australian Accounting Standards Simplified Disclosures and the Public Governance, Performance and Accountability (Financial Reporting) Rule 2015; and
- (b) present fairly the financial position of the Entity as at 30 June 2022 and its financial performance and cash flows for the year then ended.

The financial statements of the Entity, which I have audited, comprise the following as at 30 June 2022 and for the year then ended:

- Statement by the Accountable Authority and Chief Financial Officer;
- Statement of Comprehensive Income;
- Statement of Financial Position;
- Statement of Changes in Equity;
- Cash Flow Statement; and
- Notes to the financial statements, comprising a summary of significant accounting policies and other explanatory information.

Basis for opinion

I conducted my audit in accordance with the Australian National Audit Office Auditing Standards, which incorporate the Australian Auditing Standards. My responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of my report. I am independent of the Entity in accordance with the relevant ethical requirements for financial statement audits conducted by the Auditor-General and his delegates. These include the relevant independence requirements of the Accounting Professional and Ethical Standards Board's APES 110 *Code of Ethics for Professional Accountants (including Independence Standards)* (the Code) to the extent that they are not in conflict with the *Auditor-General Act 1997*. I have also fulfilled my other responsibilities in accordance with the Code. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

Accountable Authority's responsibility for the financial statements

As the Accountable Authority of the Entity, the Chief Executive Officer is responsible under the *Public Governance, Performance and Accountability Act 2013* (the Act) for the preparation and fair presentation of annual financial statements that comply with Australian Accounting Standards – Simplified Disclosures and the rules made under the Act. The Chief Executive Officer is also responsible for such internal control as the Chief Executive Officer determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Chief Executive Officer is responsible for assessing the ability of the Entity to continue as a going concern, taking into account whether the Entity's operations will cease as a result of an administrative restructure or for any other reason. The Chief Executive Officer is also responsible for disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the assessment indicates that it is not appropriate.

GPO Box 707, Canberra ACT 2601 38 Sydney Avenue, Forrest ACT 2603 Phone (02) 6203 7300

Auditor's responsibilities for the audit of the financial statements

My objective is to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes my opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the Australian National Audit Office Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

As part of an audit in accordance with the Australian National Audit Office Auditing Standards, I exercise professional judgement and maintain professional scepticism throughout the audit. I also:

- identify and assess the risks of material misstatement of the financial statements, whether due to fraud or
 error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is
 sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material
 misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion,
 forgery, intentional omissions, misrepresentations, or the override of internal control;
- obtain an understanding of internal control relevant to the audit in order to design audit procedures that are
 appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of
 the Entity's internal control;
- evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Accountable Authority;
- conclude on the appropriateness of the Accountable Authority's use of the going concern basis of accounting
 and, based on the audit evidence obtained, whether a material uncertainty exists related to events or
 conditions that may cast significant doubt on the Entity's ability to continue as a going concern. If I conclude
 that a material uncertainty exists, I am required to draw attention in my auditor's report to the related
 disclosures in the financial statements or, if such disclosures are inadequate, to modify my opinion. My
 conclusions are based on the audit evidence obtained up to the date of my auditor's report. However, future
 events or conditions may cause the Entity to cease to continue as a going concern; and
- evaluate the overall presentation, structure and content of the financial statements, including the
 disclosures, and whether the financial statements represent the underlying transactions and events in a
 manner that achieves fair presentation.

I communicate with the Accountable Authority regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

Australian National Audit Office

SBORD.

Sally Bond Executive Director Delegate of the Auditor-General

Canberra 26 September 2022

Financial statements contents

Statement by the Accountable Authority and Chief Financial Officer	80
Primary financial statements	
Statement of Comprehensive Income	81
Statement of financial position	83
Statement of changes in equity	86
Cash flow statement	89
Overview	91
Notes to the financial statements	
1: Financial performance	
1.1: Expenses	93
1.2: Own-source revenue and gains	96
2: Financial position	
2.1: Financial assets	99
2.2: Non-financial assets	102
2.3: Payables	107
2.4: Interest bearing liabilities	107
3: Funding	
3.1: Appropriations	108
3.2: Special accounts	111
3.3: Regulatory charging	112
3.4: Net cash appropriation arrangements	113
4: People and relationships	
4.1: Employee provisions	114
4.2: Key management personnel remuneration	116
4.3: Related party disclosures	117
5: Managing uncertainties	
5.1: Contingent liabilities and assets	117
5.2: Financial instruments	118
5.3: Fair value measurements	120
6: Other information	
6.1: Current/non-current distinction for assets and liabilities	121

Statement by the Accountable Authority and Chief Financial Officer

STATEMENT BY THE ACCCOUNTABLE AUTHORITY AND CHIEF FINANCIAL OFFICER

In our opinion, the attached financial statements for the year ended 30 June 2022 comply with subsection 42(2) of the *Public Governance, Performance and Accountability Act 2013* (PGPA Act), and are based on properly maintained financial records as per subsection 41(2) of the PGPA Act.

In our opinion, at the date of this statement, there are reasonable grounds to believe that the Australian Radiation Protection and Nuclear Safety Agency will be able to pay its debts as and when they fall due.

bellen Hunch

Dr Gillian Hirth Accountable Authority

26 September 2022

Niraj Pau Chief Financial Officer

26 September 2022

Statement of comprehensive income

for the period ended 30 June 2022

				Original Budge
		2022	2021	2022
NET COST OF SERVICES	Notes	\$	\$:
Expenses				
Employee benefits	<u>1.1A</u>	18,118,981	18,485,944	17,802,000
Suppliers	<u>1.1B</u>	8,269,612	7,514,502	8,633,000
Depreciation and amortisation	<u>2.2A</u>	3,374,602	3,336,376	2,815,000
Finance costs	<u>1.1C</u>	3,297	5,174	16,000
Impairment loss on financial instruments	<u>1.1D</u>	20,756	9,240	
Write-down and impairment of other assets	<u>1.1E</u>	117,004	50,962	
Foreign exchange losses	<u>1.1F</u>	-	4,533	
Total expenses		29,904,252	29,406,731	29,266,000
Own-source income				
Own-source revenue				
Revenue from contracts with customers	<u>1.2A</u>	7,980,081	7,568,762	7,550,000
Licence fees	<u>1.2B</u>	5,518,671	5,260,420	5,279,000
Other revenue	<u>1.2C</u>	56,000	54,000	
Total own-source revenue		13,554,752	12,883,182	12,829,000
Gains				
Foreign exchange gains	<u>1.2D</u>	1,565	-	
Total gains		1,565	-	
Total own-source income		13,556,317	12,883,182	12,829,000
Net (cost of) contribution by services		16,347,935	16,523,549	16,437,000
Revenue from Government	<u>1.2E</u>	14,967,000	13,869,000	13,859,000
Surplus / (Deficit) on continuing operations		(1,380,935)	(2,654,549)	(2,578,000

OTHER COMPREHENSIVE INCOME

Items not subject to subsequent reclassification to net cost of services							
Changes in asset revaluation reserve	1,532,790	2,000,895	-				
Total other comprehensive income	1,532,790	2,000,895	-				
Total comprehensive loss	151,855	(653,654)	(2,578,000)				

The above statement should be read in conjunction with the accompanying notes.

Statement of Comprehensive Income Budget variances

Explanations are only provided where the variance is greater than 10% of the Original Budget. If the variance is greater than 10%, but small in the overall context of the financial statements, judgement was used to determine if an explanation would be useful in analysing ARPANSA's performance.

Suppliers

Supplier expenses, specifically those relating to travel, were lower than that estimated at budget as result of COVID-19.

Depreciation

Building depreciation expenses were higher than estimated at budget and related to an increase in building value.

Own source revenue

Revenue from contracts with customers increased from that estimated at budget and related to the Personal Radiation Monitoring and the ACDS. Licence application fees were also higher than that estimated at budget.

Revenue from Government

At Additional Estimates, ARPANSA received a transfer of funds to support the Nuclear-Powered Submarine Taskforce.

Statement of financial position

as at 30 June 2022

				Original Budget
		2022	2021	2022
	Notes	\$	\$	Ş
ASSETS				
Financial assets				
Cash and cash equivalents	<u>2.1A</u>	5,181,632	1,207,753	1,192,000
Trade and other receivables	<u>2.1B</u>	8,469,714	6,192,657	4,126,000
Other financial assets	<u>2.1C</u>	566,323	530,715	45,000
Total financial assets		14,217,669	7,931,125	5,363,000
Non-financial assets ¹				
Land	<u>2.2A</u>	12,010,000	11,260,000	9,460,000
Buildings	<u>2.2A</u>	17,019,776	17,234,805	17,500,000
Plant and equipment	<u>2.2A</u>	11,934,133	9,587,530	11,384,000
Intangibles	<u>2.2A</u>	916,393	560,178	571,000
Inventories	<u>2.2B</u>	1,750,046	1,700,982	1,610,000
Other non-financial assets	<u>2.2C</u>	782,185	563,580	510,000
Total non-financial assets		44,412,533	40,907,075	41,035,000
Total assets		58,630,202	48,838,200	46,398,000
LIABILITIES				
Payables				
Suppliers	<u>2.3A</u>	940,038	429,389	744,000
Other payables	<u>2.3B</u>	5,077,596	915,116	793,000
Total payables		6,017,634	1,344,505	1,537,000

Interest bearing liabilities

•				
Leases	<u>2.4</u>	361,349	160,239	423,000
Total interest-bearing liabi	ilities	361,349	160,239	423,000
Provisions				
Employee provisions	<u>4.1</u>	5,967,432	5,734,524	5,307,000
Total provisions		5,967,432	5,734,524	5,307,000
Total liabilities		12,346,415	7,239,268	7,267,000
Net assets		46,283,787	41,598,932	39,131,000
EQUITY				
Contributed equity		41,010,000	36,477,000	38,510,000
Reserves		23,108,504	21,575,714	19,574,000
Accumulated deficit		(17,834,717)	(16,453,782)	(18,953,000)
Total equity		46,283,787	41,598,932	39,131,000

The above statement should be read in conjunction with the accompanying notes.

1. Right-of-use assets are included in the following line item; Buildings

Statement of Financial Position Budget variances

Explanations are only provided where the variance is greater than 10% of the Original Budget. If the variance is greater than 10%, but small in the overall context of the financial statements, judgement was used to determine if an explanation would be useful in analysing ARPANSA's performance.

Cash, trade and other receivables

The cash, trade and other receivables budget variations relate to the timing of the issue and payment of 2022-23 annual licence charge invoices and an increase in appropriation receivables at year end. Related to other payables variation.

Other financial assets

Accrued revenue was higher than the forecast at budget, and specifically relates to the Comprehensive Nuclear Test Ban Treaty operation and maintenance contracts.

Land

The variance relates to the independent revaluation of land in 2022, since the budget was prepared.

Plant and equipment

The variance relates specifically to capital expenditure associated with the enhanced EME program.

Other payables

The other payable budget variation relates to an increase in unearned income associated with the timing of the issue and payment of the 2022-23 annual licence charge invoices. Related to cash, trade, and other receivables variations.

Statement of changes in equity

for the period ended 30 June 2022

				Original Budge
	Notes	2022	2021	2022
CONTRIBUTED EQUITY		\$	\$	
Opening balance				
Balance carried forward from previous period		36,477,000	32,455,000	36,477,000
Adjusted opening balance		36,477,000	32,455,000	36,477,000
Transactions with owners				
Contributions by owners				
Departmental capital budget	3.1A	4,533,000	2,035,000	2,033,000
Equity injection - appropriation		-	1,987,000	
Total transactions with owners	-	4,533,000	4,022,000	2,033,000
Closing balance as at 30 June		41,010,000	36,477,000	38,510,000
RETAINED EARNINGS				
Opening balance				
Balance carried forward from previous period		(16,453,782)	(13,799,233)	(16,375,000
Adjusted opening balance		(16,453,782)	(13,799,233)	(16,375,000
Comprehensive income				
Deficit for the period		(1,380,935)	(2,654,549)	(2,578,000
Total comprehensive income		(1,380,935)	(2,654,549)	(2,578,000

ASSET REVALUATION RESERVE

Balance carried forward from previous period	21,575,714	19,574,819	19,574,000
Adjusted opening balance	21,575,714	19,574,819	19,574,000
Comprehensive income			
Other comprehensive income	1,532,790	2,000,895	-
Total comprehensive income	1,532,790	2,000,895	-
Closing balance as at 30 June	23,108,504	21,575,714	19,574,000
TOTAL EQUITY			
Opening balance			
Balance carried forward from previous period	41,598,932	38,230,586	39,676,000
Adjusted opening balance	41,598,932	38,230,586	39,676,000
Comprehensive income			
Other comprehensive income	1,532,790	2,000,895	-
Surplus / (deficit) for the period	(1,380,935)	(2,654,549)	(2,578,000)
Total comprehensive income	151,855	(653,654)	(2,578,000)
Transactions with owners			
Contributions by owners			
Departmental capital budget	4,533,000	2,035,000	2,033,000
Equity injection - appropriation	-	1,987,000	-
Total transactions with owners	4,533,000	4,022,000	2,033,000

The above statement should be read in conjunction with the accompanying notes.

Accounting policy

Equity Injections

Amounts appropriated which are designated as 'equity injections' for a year (less any formal reductions) and Departmental Capital Budgets (DCBs) are recognised directly, in contributed equity in that year.

Restructuring of Administrative Arrangements

Net assets received from or relinquished to another Government entity under a restructuring of administrative arrangements are adjusted at their book value directly against contributed equity.

Statement of Changes in Equity Budget variances commentary

Net assets received from or relinquished to another Government entity under a restructuring of administrative arrangements are adjusted at their book value directly against contributed equity.

Contributed Equity

Increase in terminating funding for a replacement Linear Accelerator and the refurbishment of its housing laboratory since the budget was prepared.

Asset Revaluation Reserves

Increase relates to the independent revaluation of land and buildings in 2022, since the budget was prepared.

Cash flow statement

for the period ended 30 June 2022

				Original Budge
		2022	2021	2022
	Notes	\$	\$	
OPERATING ACTIVITIES				
Cash received				
Appropriations		13,269,000	14,057,000	13,859,00
Sales of goods and rendering of services		11,835,916	7,950,707	7,973,00
Other cash received		5,518,671	5,260,420	5,279,00
GST received		254,441	122,616	482,00
Total cash received		30,878,028	27,390,743	27,593,00
Cash used				
Employees		(17,894,786)	(17,988,091)	(17,802,000
Suppliers		(9,092,572)	(8,722,108)	(9,115,000
Interest payments on lease liabilities		(3,297)	(5,174)	(16,000
GST paid		-	-	(423,000
Total cash used		(26,990,655)	(26,715,373)	(27,356,000
Net cash from / (used by) operating activities		3,887,373	675,370	237,00
INVESTING ACTIVITIES				
Cash used				
Purchase of property, plant, equipment, and intangibles		(4,756,934)	(2,012,516)	(2,033,000
Total cash used		(4,756,934)	(2,012,516)	(2,033,000
Net cash from / (used by) investing activities		(4,756,934)	(2,012,516)	(2,033,000

FINANCING ACTIVITIES

Cash received			
Contributed equity - Departmental capital budget	3,640,000	1,599,000	2,033,000
Contributed equity - Equity injection	1,442,000	-	-
Total cash received	5,082,000	1,599,000	2,033,000
Cash used			
Principal payments of lease liabilities	(238,560)	(246,329)	(237,000)
Total cash used	(238,560)	(246,329)	(237,000)
Net cash from / (used by) financing activities	4,843,440	1,352,671	1,796,000
Net increase / (decrease) in cash held	3,973,879	15,525	-
Cash and cash equivalents at the beginning of the reporting period	1,207,753	1,192,228	1,192,000
Cash and cash equivalents at the end of2.1Athe reporting period	5,181,632	1,207,753	1,192,000

The above statement should be read in conjunction with the accompanying notes.

Cash Flow Statement Budget variances commentary

Explanations are only provided where the variance is greater than 10% of the Original Budget. If the variance is greater than 10%, but small in the overall context of the financial statements, judgement was used to determine if an explanation would be useful in analysing ARPANSA's performance.

Variances relating to cash flows occur because of the factors detailed under expenses, own source income, assets, or liabilities.

Investing Activities - Cash Used and Financing Activities - Cash Received

The variance relates to the drawdown of a prior year equity injection and capital expenditure of funds associated with the enhanced EME program, and the linear accelerator.

Overview

Objectives of the Australian Radiation Protection and Nuclear Safety Agency

ARPANSA is an Australian Government controlled not-for-profit entity. It is a non-corporate Commonwealth Entity under the Public Governance Performance and Accountability Act 2013. The objectives of ARPANSA are to protect people and the environment from the harmful effects of radiation.

ARPANSA is structured to meet one outcome:

'Protection of people and the environment through radiation protection and nuclear safety research, policy, advice, codes, standards, services and regulation.'

The continued existence of ARPANSA in its present form and with its present programs is dependent on Government policy and on continuing funding by Parliament for the Entity's administration and programs.

ARPANSA's activities contributing toward the outcome, are classified as departmental. Departmental activities involve the use of assets, liabilities, income, and expenses controlled or incurred by the Entity in its own right.

Basis of preparation of the financial report

The financial statements are general purpose financial statements and are required by section 42 of the *Public Governance Performance and Accountability Act 2013*.

The financial statements and notes have been prepared in accordance with:

- a) PGPA (Financial Reporting) Rule 2015 (FRR); and
- b) Australian Accounting Standards and Interpretations Reduced Disclosure Requirements issued by the Australian Accounting Standards Board (AASB) that apply for the reporting period.

The financial statements have been prepared on an accrual basis and are in accordance with historical cost convention, except for certain assets and liabilities at fair value. Except where stated, no allowance is made for the effect of changing prices on the results or the financial position. The financial statements are presented in Australian dollars.

Accounting judgements and estimates

In the process of applying the accounting policies listed in this note, ARPANSA have made the following judgements that have the most significant impact on the amounts recorded in the financial statements:

- The fair value of land and buildings is taken to be the market value and depreciated replacement cost respectively as determined by an independent valuer.
- The long service leave liability is calculated using the shorthand model developed by the Australian Government Actuary.

No accounting assumptions or estimates have been identified that have a significant risk of causing a material adjustment to carrying amounts of assets and liabilities within the next accounting period.

New Australian Accounting Standard

All new, revised, amending standards and interpretations that were issued prior to the sign-off date and are applicable to the current reporting period did not have a material effect on ARPANSA's financial statements.

Standard / Interpretation	Nature of change in accounting policy, transitional provisions, and adjustment to financial statements
AASB 1060 General Purpose Financial Statements – Simplified Disclosures for For-Profit and Not- for-Profit Tier 2 Entities	AASB 1060 applies to annual reporting periods beginning on or after 1 July 2021 and replaces the reduced disclosure requirements (RDR) framework. The application of AASB 1060 involves some reduction in disclosure compared to the RDR with no impact on the reported financial position, financial performance, and cash flows of the entity.

Taxation

ARPANSA is exempt from all forms of taxation except Fringe Benefits Tax (FBT) and Goods and Services Tax (GST).

Revenues, expenses, and assets are recognised net of GST, except:

- a) where the amount of GST incurred is not recoverable from the Australian Taxation Office; and
- b) for receivables and payables.

Events after the reporting period

There have been no significant subsequent events after the reporting period that impact on the financial statement for the year ended 30 June 2022.

COVID-19 pandemic

There has been no material impact on the financial statement for the year ended 30 June 2022 as a result of COVID-19.

Notes to and forming part of the financial statements

Financial performance

This section analyses the financial performance of ARPANSA for the year ended 30 June 2022.

Note 1.1: Expenses

1.1A: Employee benefits

	2022	2021
	\$	\$
Wages and salaries	12,952,983	13,464,766
Superannuation - defined contribution	1,842,339	1,915,430
Superannuation - defined benefit	659,490	655,600
Leave and other entitlements	2,610,927	2,328,596
Separation and redundancies	53,242	121,552
Total employee benefits	18,118,981	18,485,944

ACCOUNTING POLICY

Accounting policies for employee related expenses are contained in the people and relationships section.

1.1B: Suppliers

	2022	2021
	\$	\$
Goods and services supplied or rendered		
Audit fees - ANAO	56,000	54,000
Advisory council and committees	99,068	95,530
Communications	302,260	332,398
Construction and maintenance - Comprehensive Nuclear-Test-Ban Treaty	854,296	749,557
Contractors/Consultants	1,552,870	1,226,123
Information technology	1,332,955	1,108,879
Insurance	95,635	102,811
Laboratory and office supplies	300,919	325,923
Postage and freight	210,222	208,311
Reference material and subscriptions	331,309	282,896
Repair and maintenance	663,636	531,113
Research agreements	254,883	680,121
Training and conferences	225,908	224,245
Travel	914,989	449,428
Utilities	478,482	428,737
Other goods and services	566,365	673,838
Total goods and services supplied or rendered	8,239,797	7,473,910
Goods supplied	1,588,064	2,048,653
Services rendered	6,651,733	5,425,257
Total goods and services supplied or rendered	8,239,797	7,473,910
Other supplier expenses		
Low value leases	1,477	14,771
Workers' compensation premiums	28,338	25,821
Total other supplier expenses	29,815	40,592
	8,269,612	7,514,502

The above lease disclosures should be read in conjunction with the accompanying notes 1.1B, 2.2 and 2.4.

Short-term leases and leases of low-value assets

ARPANSA has elected not to recognise right-of-use assets and lease liabilities for short-term leases of assets that have a lease term of 12 months or less and leases of low-value assets (less than \$10,000). ARPANSA recognises the lease payments associated with these leases as an expense on a straight-line basis over the lease term.

Note 1.1C: Finance costs

	2022	2021
	\$	\$
Interest on lease liabilities	3,297	5,174

Note 1.1D: Implement loss of financial instruments

	2022	2021
	\$	\$
Impairment on trade and other receivables	20,756	9,240

Note 1.1E: Write-down and impairment of other assets

	2022	2021
	\$	\$
Property, plant, and equipment - write-off	107,299	34,374
Computer software - write-off	9,705	-
Inventories - write-off	-	15,588
Total write-down and impairment of assets	117,004	50,962

Note 1.1F: Foreign exchange losses

	2022	2021
	\$	\$
Non-speculative	-	
Total foreign exchange losses	-	4,533

ACCOUNTING POLICY

Gains and losses from foreign currency are recognised when incurred.

Note 1.2: Own-source revenue and gains

Own-source revenue

1.2A: REVENUE FROM CONTRACTS WITH CUSTOMERS

	2022	2021
	\$	\$
Sale of goods and rendering of services	7,980,081	7,568,762
Total revenue from contracts with customers	7,980,081	7,568,762
Major product / service line:		
Scientific services - Personal Radiation Monitoring Service	2,554,097	2,356,410
Construction and maintenance - Comprehensive Nuclear-Test- Ban Treaty	2,062,746	2,065,663
ACDS	2,076,874	1,882,335
Other scientific services	1,286,364	1,264,354
	7,980,081	7,568,762
Type of customer:		
Australian Government entities (related parties)	108,755	98,365
State and territory governments	941,924	871,537
Non-government entities	6,929,402	6,598,860
	7,980,081	7,568,762
Timing of transfer of goods and services:		
Over time	4,139,620	3,947,998
Point in time	3,840,461	3,620,764
	7,980,081	7,568,762

Revenue from the sale of goods is recognised when control has been transferred to the buyer.

ARPANSA's 'Sale of good and service contract' falls within scope of AASB 15. Performance obligations are required by enforceable contracts and are sufficiently specific to enable ARPANSA to determine when they have been satisfied.

The following is a description of principal activities from which ARPANSA generates its revenue:

- i. Personal Radiation Monitoring Service monitors potential ionising radiation exposure to workers in fields such as medical, dental, chiropractic, industrial and mining.
- ii. Comprehensive Nuclear-Test-Ban Treaty (CTBT) ARPANSA is responsible for carrying out Australia's radionuclide monitoring obligations to the CTBT. In this capacity, ARPANSA has worked to establish the international monitoring systems required to monitor treaty compliance through the installation, implementation, and operation of 7 stations within Australia and its Territories. The CTBT team within ARPANSA has also expanded to include operational responsibility for the radionuclide stations situated in Fiji and Kiribati.
- iii. ACDS ARPANSA's national independent dosimetry auditing program, providing quality assurance for radiation oncology facilities and patients. The ACDS has been operating since February 2011, covering 100% of Australian and selected New Zealand radiotherapy facilities.
- iv. Other scientific services including testing and calibrations (ultraviolet and radio analytical services), training and hire of radiation meters.

Receivables for goods and services, which have 30-day terms, are recognised at the nominal amounts due, less any impairment allowance account. Collectability of debts are reviewed at end of the reporting period. Allowances are made when collectability of the debt is no longer probable.

NOTE 1.2B: LICENCE FEES

	2022	2021
	\$	\$
Application fees	147,374	13,989
Annual charges	5,371,297	5,246,431
Total licence fees	5,518,671	5,260,420

Under paragraph 34(b) of the *Australian Radiation Protection and Nuclear Safety Act 1998*, an application for a licence must be accompanied by a fee prescribed in the regulations. Revenue for licence applications is recognised when an application for a licence is received.

NOTE 1.2C: OTHER REVENUE

	2022	2021
	\$	\$
Resources received free of charge - ANAO	56,000	54,000
Total other revenue	56,000	54,000

ACCOUNTING POLICY

Resources received free of charge are recognised as revenue when, and only when a fair value can be reliably determined, and the services would have been purchased if they had not been donated. Use of those resources is recognised as an expense.

Resources received free of charge are recorded as either revenue or gains depending on their nature.

Gains

1.2D: FOREIGN EXCHANGE GAINS

	2022	2021
	\$	\$
Non-speculative	1,565	-
Total foreign exchange gains	1,565	-

ACCOUNTING POLICY

Gains and losses from foreign currency are recognised when incurred.

1.2E: REVENUE FROM GOVERNMENT

	2022	2021
Appropriation:	\$	\$
Departmental appropriation	14,967,000	13,869,000
Total revenue from Government	14,967,000	13,869,000

Amounts appropriated for departmental appropriations for the year (adjusted for any formal additions and reductions) are recognised as Revenue from Government when the Entity gains control of the appropriation, except for certain amounts that relate to activities that are reciprocal in nature, in which case revenue is recognised only when it has been earned.

Section 56 (3) of the *Australian Radiation Protection and Nuclear Safety Act 1998*, requires that money appropriated by the Parliament be transferred to the special account (notes 2.1A and 3.2 refer).

Appropriations receivables are recognised at their nominal amounts.

Financial position

This section analyses ARPANSA's assets used to conduct its operations and the operating liabilities incurred as a result, for the year ended 2022. Employee related information is disclosed in the People and relationships section.

Note 2.1: Financial assets

Note 2.1A: Cash and cash equivalents

	2022	2021
	\$	\$
Cash in special accounts	5,127,014	1,149,018
Cash on hand or on deposit	54,618	58,735
Total cash and cash equivalents	5,181,632	1,207,753

The closing balance of Cash in special accounts does not include any amounts held in trust: (nil in 2021).

Accounting policy

Cash is recognised at its nominal amount. Cash and cash equivalents include:

- a) cash at bank
- b) cash in special accounts.

Note 2.1B: Trade and other receivables

	2022	2021
	\$	\$
Goods and services receivables		
Goods and services	1,892,975	904,531
Total goods and services receivables	1,892,975	904,531
Appropriations receivable:		
For existing program	3,367,000	1,669,000
Undrawn equity injection	545,000	1,987,000
Departmental capital budget	2,528,000	1,635,000
Total appropriations receivable	6,440,000	5,291,000
Other receivables		
Statutory receivables - GST	179,751	24,262
Total other receivables	179,751	24,262
Total trade and other receivables (gross)	8,512,726	6,219,793
Less impairment loss allowance	(43,012)	(27,136)
Total trade and other receivables (net)	8,469,714	6,192,657

Goods and services receivable was with entities external to the Australian Government. Credit terms are net 30 days (2021: 30 days).

Receivables

Trade receivables, and other receivables that are held for the purpose of collecting the contractual cash flows where the cash flows are solely payments of principal and interest, that are not provided at below-market interest rates, are subsequently measured at amortised cost using the effective interest method adjusted for any loss allowance.

Reconciliation of impairment allowance

Goods and services	2022	2021
	\$	\$
Opening Balance	27,136	21,835
Amounts recovered and reversed	43	425
Amounts written off	(4,923)	(4,364)
Increase/decrease recognised in net cost of services	20,756	9,240
Closing Balance	43,012	27,136

Note 2.1C: Other financial assets

	2022	2021
	\$	\$
Accrued revenue	566,323	530,715
Total other financial assets	566,323	530,715

Total other financial assets are expected to be recovered in no more than 12 months.

ACCOUNTING POLICY

Financial assets are assessed for impairment at the end of each reporting period.

Note 2.2: Non-financial assets

Note 2.2A: Reconciliation of the opening and closing balances of property, plant and equipment and intangibles

	Land	Buildings	Leasehold improvements	Plant and equipment	Computer software ¹	Other intangibles	Total
						- Trademarks	
	\$	\$	\$	\$	\$	\$	\$
As at 1 July 2021							
Gross book value	11,260,000	17,234,805	256,275	15,541,379	4,396,803	3,200	48,692,462
Accumulated depreciation, amortisation, and impairment	-	-	(256,275)	(5,953,849)	(3,839,120)	(705)	(10,049,949)
Total as at 1 July 2021	11,260,000	17,234,805	-	9,587,530	557,683	2,495	38,642,513
Additions:							
Purchase		14,857	-	4,150,418	591,659	-	4,756,934
Revaluations and impairments recognised in other comprehensive income	750,000	782,790	-	-		-	1,532,790
Depreciation and amortisation	-	(1,132,647)	-	(1,777,068)	(225,419)	(320)	(3,135,454)
Depreciation on right-of-use assets	-	(239,148)	-	-		-	(239,148)
Other movements:							
Reclassification	-	(80,552)	-	80,552		-	-
Initial recognition	-	-	-			-	-
Other movements of right-of-use assets	-	439,671	-	-	-	-	439,671
Disposals:							
Write-offs	-	-	-	(107,299)	(9,705)	-	(117,004)
Total as at 30 June 2022	12,010,000	17,019,776	-	11,934,133	914,218	2,175	41,880,302

Total as at 30 June 2022 represented by:

Gross book value	12,010,000	17,019,776	256,275	18,851,371	4,282,471	3,200	52,423,093
Accumulated depreciation, amortisation, and impairment	-	-	(256,275)	(6,917,238)	(3,368,253)	(1,025)	(10,542,791)
Total as at 30 June 2022	12,010,000	17,019,776	-	11,934,133	914,218	2,175	41,880,302
Carrying amount of right-of-use assets		360,276	-	-	-	-	360,276

1. The carrying amount of computer software included \$608,108 purchased software and \$306,109 internally developed software.

There were no indicators of impairment found for property, plant, and equipment.

No property plant and equipment or intangibles are expected to be sold or disposed of within the next 12 months.

Revaluations of non-financial assets

All revaluation were conducted in accordance with the revaluation policy as stated in this note. On 30 June 2022, an independent valuer conducted revaluations of Land (increment \$750,000) and Buildings on freehold land (increment of \$783,790).

Accounting policy

Assets are recorded at cost on acquisition except as stated below. The cost of acquisition includes the fair value of assets transferred in exchange and liabilities undertaken.

Assets acquired at no cost, or for nominal consideration, are initially recognised as assets and income at their fair value at the date of acquisition, unless acquired as a consequence of restructuring of administrative arrangements. In the latter case, assets are initially recognised as contributions by owners at the amounts at which they were recognised in the transferor's accounts immediately prior to the restructuring.

Asset recognition threshold

Purchases of property, plant and equipment are recognised initially at cost in the Statement of Financial Position, except for purchases costing less than \$2,000, which are expensed in the year of acquisition (other than where they form part of a group of similar items which are significant in total).

Lease Right of Use (ROU) Assets

Leased ROU assets are capitalised at the commencement date of the lease and comprises the initial lease liability amount and initial direct costs incurred when entering into the lease, less any lease incentives received. These assets are accounted for by Commonwealth lessees as separate asset classes to corresponding assets owned outright but included in the same column as where the corresponding underlying assets would be presented if they were owned.

On initial adoption of AASB 16 ARPANSA has adjusted the ROU assets at the date of initial application by the amount of any provision for onerous leases recognised immediately before the date of initial application. Following initial application, an impairment review is undertaken for any right of use lease asset that shows indicators of impairment and an impairment loss is recognised against any right of use lease asset that is impaired. Lease ROU assets continue to be measured at cost after initial recognition in Commonwealth agency, GGS and Whole of Government financial statements.

Revaluations

Following initial recognition at cost, property plant and equipment (excluding ROU assets) are carried at fair value (or an amount not materially different from fair value) less subsequent accumulated depreciation and accumulated impairment losses. Valuations are conducted with sufficient frequency to ensure that the carrying amounts of assets do not differ materially from the assets' fair values as at the reporting date. The regularity of independent valuations depends upon the volatility of movements in market values for the relevant assets.

Revaluation adjustments are made on a class basis. Any revaluation increment is credited to equity under the heading of asset revaluation reserve except to the extent that it reverses a previous revaluation decrement of the same asset class that was previously recognised in the surplus/deficit. Revaluation decrements for a class of assets

are recognised directly in the surplus/deficit except to the extent that they reverse a previous revaluation increment for that class.

Any accumulated depreciation as at the revaluation date is eliminated against the gross carrying amount of the asset and the asset restated to the revalued amount.

Independent valuers from the Jones Lang LaSalle Advisory Services Pty Ltd conducted a desktop valuation of land and buildings on 30 June 2022.

Revaluation increment of \$750,000 for land (increment 2021: \$1,800,000) and increment of \$782,790 for buildings on freehold land (2021: \$200,895) were transferred to the asset revaluation reserve surplus by asset class and included in the equity section of the statement of financial position.

Depreciation rates applying to each class of depreciable asset are based on the following useful lives:

	2022	2021
Buildings on freehold land	14	15
Leasehold improvements	Lease term - 2 years	Lease term - 4 years
Plant and equipment	1 to 45 years	1 to 45 years

The depreciation rates for ROU assets are based on the commencement date to the earlier of the end of the useful life of the ROU asset or the end of the lease term.

Impairment

All assets were assessed for impairment at 30 June 2022. Where indications of impairment exist, the asset's recoverable amount is estimated, and an impairment adjustment made if the asset's recoverable amount is less than it's carrying amount.

The recoverable amount of an asset is the higher of its fair value less costs to sell and its value in use. Value in use is the present value of the future cash flows expected to be derived from the asset. Where the future economic benefit of an asset is not primarily dependent on the asset's ability to generate future cash flows, and the asset would be replaced if ARPANSA were deprived of the asset, its value in use is taken to be its depreciated replacement cost.

Derecognition

An item of property, plant and equipment is derecognised upon disposal or when no further future economic benefits are expected from its use or disposal.

Intangibles

ARPANSA's intangibles comprise purchased software, internally developed software for internal use and trademarks. These assets are carried at cost less accumulated amortisation and accumulated impairment losses.

Intangibles are amortised on a straight-line basis over their anticipated useful life. The useful lives of ARPANSA's intangibles are 1.7 to 12.6 years (2021: 1.7 to 12.6 years).

All intangibles' assets were assessed for indications of impairment as at 30 June 2022.

Note 2.2B Inventories

	2022	2021
	\$	\$
Inventories held for sale		
Finished goods	7,992	12,561
Total Inventories held for sale	7,992	12,561
Inventories held for distribution	1,742,054	1,688,421
Total inventories	1,750,046	1,700,982

During 2021-22, \$29,329 of inventory held for sale was recognised as an expense (2020-21: \$31,161).

During 2021-22, \$81,315 of inventory held for distribution was recognised as an expense (2020-21: \$206,290).

All inventory is expected to be sold or distributed in the next 12 months.

ACCOUNTING POLICY

Inventories held for sale are valued at the lower of cost and net realisable value.

Inventories held for distribution are valued at cost, adjusted for any loss of service potential.

Note 2.2C: Other non-financial assets

	2022	2021
	\$	\$
Prepayments	782,185	563,580
Total other non-financial assets	782,185	563,580

No indicators of impairment were found for other non-financial assets.

Note 2.3: Payables

Note 2.3A: Suppliers

	2022	2021
	\$	\$
Trade creditors and accruals	940,038	429,389
Total suppliers	940,038	429,389

Settlement is usually made within 30 days.

Note 2.3B: Other payables

	2022	2021
	\$	\$
Salaries and wages	321,561	340,971
Superannuation	57,680	48,884
Unearned income	4,641,835	466,526
Other	56,520	58,735
Total other payables	5,077,596	915,116

Note 2.4: Interest bearing liabilities

	2022	2021
	\$	\$
Lease liabilities	361,349	160,239
Total leases	361,349	160,239

Maturity analysis - contractual undiscounted cash flows		
Within 1 year	220,000	168,525
Between 1 to 5 years	146,667	-
Total leases	366,667	168,525

Total cash outlay for leases for the year ended 30 June 2022 was \$238,560 (2021: \$246,329).

Accounting policy

Refer Overview section for accounting policy on leases.

Funding

This section identifies ARPANSA's funding structure.

Note 3.1: Appropriations

In accordance with section 56 of the *Australian Radiation Protection and Nuclear Safety Act 1998*, all monies received by ARPANSA are to be paid into the ARPANSA Special Account. Pursuant to this section, all monies paid into this Account are automatically appropriated for the use of ARPANSA.

Note 3.1A: Annual appropriations ('recoverable GST exclusive')

Annual appropriations for 2022

	Annual appropriation ¹	Adjustments to appropriation ²	Total appropriation	Appropriation applied in 2022 (current and prior years)	Variance ³
	\$	\$	\$	\$	\$
DEPARTMENTAL					
Ordinary annual services	14,967,000	-	14,967,000	13,269,000	1,698,000
Capital Budget ⁴	4,533,000	-	4,533,000	3,640,000	893,000
Other services					
Equity injections	-	-	-	1,442,000	(1,442,000)
Total departmental	19,500,000	-	19,500,000	18,351,000	1,149,000

Notes:

1. No funds have been withheld (Section 51 of the PGPA Act) or quarantined for administrative purposes.

2. No adjustments have been applied to Appropriations.

3. The variance of \$1,149,000 reflects the movement in appropriation receivable amount at 30 June 2022 for ordinary annual services, capital budget and other services.

4. Departmental Capital Budgets are appropriated through Appropriation Acts (No.1,3,5). They form part of ordinary annual services and are not separately identified in the Appropriation Acts.

Annual appropriations for 2021

	Annual appropriation ¹	Adjustments to appropriation ²	Total appropriation	Appropriation applied in 2021 (current and prior years)	Variance ³
	\$	\$	\$	\$	\$
DEPARTMENTAL					
Ordinary annual services	13,869,000	-	13,869,000	14,057,000	(188,000)
Capital Budget ⁴	2,035,000	-	2,035,000	1,599,000	436,000
Other services					
Equity injections	1,987,000	-	1,987,000		1,987,000
Total departmental	17,891,000	-	17,891,000	15,656,000	2,235,000

Notes:

1. No funds have been withheld (Section 51 of the PGPA Act) or quarantined for administrative purposes.

2. No adjustments have been applied to Appropriations.

3. The variance of \$2,235,000 reflects the movement in appropriation receivable amount at 30 June 2021 for ordinary annual services, capital budget and other services.

4. Departmental Capital Budgets are appropriated through Appropriation Acts (No.1,3,5). They form part of ordinary annual services and are not separately identified in the Appropriation Acts.

2022 2021 \$ \$ Authority DEPARTMENTAL Appropriation Act (No. 1) 2021-22 3,792,000 Appropriation Act (No. 3) 2021-22 2,103,000 Appropriation Act (No. 1) 2021-22 - cash at bank 54,618 _ Appropriation Act (No. 1) 2020-21 2,516,000 Appropriation Supply Act (No. 1) 2020-21 788,000 -Appropriation Act (No. 2) - Equity Injections 827,000 -Supply Act (No. 2) - Equity Injections 545,000 1,160,000 Appropriation Act (No. 1) 2020-21 - cash at bank -58,735 **Total Departmental** 6,494,618 5,349,735

Note 3.1B: Unspent annual appropriations ('recoverable GST exclusive')

Note 3.2: Special accounts

ARPANSA Special Account (Departmental)

Establishing Instrument: Australian Radiation Protection and Nuclear Safety Act 1998; s56(4)

Appropriation: PGPA Act 2013; s80

Purpose: The purpose of the Special Account is set out in the *Australian Radiation Protection and Nuclear Safety Act 1998* at section 56(4):

'The purposes of the Special Account are to make payments:

- a) to further the object of this Act (as set out in section 3); and
- b) otherwise in connection with the performance of the CEO's functions under this Act or the Regulations.'

	2022	2021
	\$	\$
Balance brought forward from previous period	1,207,753	1,192,228
Increases		
Departmental	35,956,731	28,984,569
Total increase	35,956,731	28,984,569
Available for payments	37,164,484	30,176,797
Decreases		
Departmental	(31,982,852)	(28,969,044)
Total decrease	(31,982,852)	(28,969,044)
Total Balance carried to next period	5,181,632	1,207,753
Balance represented by:		
Cash held in entity bank accounts	5,181,632	1,207,753
Total Balance carried to next period	5,181,632	1,207,753

Note 3.3 Regulatory charging

	2022	2021
	\$	\$
Expenses		
Departmental	263,988	245,556
Total expenses	263,988	245,556
External Revenue		
Departmental	263,988	245,556
Total expenses	263,988	245,556
Amounts written off		
Departmental		-
Total amounts written off	-	-

Regulatory charging activity – Import/Export permits.

Documentation (Cost Recovery Implementation Statement) for the above activity is available at:

www.arpansa.gov.au/regulation-and-licensing/licensing/import-export-permits.

	2022	2021
	\$	\$
Total comprehensive income/(loss) - as per Statement of Comprehensive Income	151,855	(653,654)
Plus: depreciation/amortisation of assets funded through appropriations (departmental capital budget funding and/or equity injection)	3,135,454	3,096,356
Plus: depreciation right-of-use asset ¹	239,148	240,020
Less: principal repayment - leased asset ²	(238,560)	(246,329)
Net Cash Operating Surplus/ (Deficit)	3,287,897	2,436,393

Note 3.4: Net cash appropriation arrangements

1. From 2010-11, the Government introduced net cash appropriation arrangements where revenue appropriations for depreciation/amortisation expenses of non-corporate Commonwealth entities and selected corporate Commonwealth entities were replaced with a separate capital budget provided through equity injections. Capital budgets are to be appropriated in the period when cash payment for capital expenditure is required.

2. The inclusion of depreciation/amortisation expenses related to ROU leased assets and the lease liability principal repayment amount reflects the impact of AASB 16 Leases, which does not directly reflect a change in appropriation arrangements.

People and relationships

This section identifies a range of employment and post-employment benefits provided to our people and our relationships with other key people.

Note 4.1: Employee provisions

	2022	2021
	\$	\$
Employee provisions		
Leave	5,967,432	5,734,524
Total employee provisions	5,967,432	5,734,524

Accounting policy

Liabilities for 'short-term employee benefits' and termination benefits expected to be settled within 12 months of the end of the reporting period are measured at their nominal amounts.

The nominal amount is calculated with regard to the rates expected to be paid on settlement of the liability.

Other long-term employee benefit liabilities are measured as net total of the present value of the defined benefit obligation at the end of the reporting period minus the fair value at the end of the reporting period of plan assets (if any) out of which the obligations are to be settled directly.

Leave

The liability for employee benefits includes provision for annual leave and long service leave. No provision has been made for sick leave as all sick leave is non-vesting and the average sick leave taken in future years by employees of the Entity is estimated to be less than the annual entitlement for sick leave.

The leave liabilities are calculated on the basis of employees' remuneration at the estimated salary rates that will be applied at the time the leave is taken, including the Entity's employer superannuation contribution rates to the extent that the leave is likely to be taken during service rather than paid out on termination.

The liability for long service leave is recognised and measured at the present value of the estimated future cash flows to be made in respect of employees as at 30 June 2022. The estimate of the present value of the liability takes into account attrition rates and pay increases through promotion and inflation.

Separation and Redundancy

Provision is made for separation and redundancy benefit payments. The Entity recognises a provision for termination when it has developed a detailed plan for terminations and has informed those employees affected that it will carry out the terminations.

Superannuation

The majority of staff of ARPANSA are members of the Commonwealth Superannuation Scheme (CSS), the Public Sector Superannuation Scheme (PSS) or the PSS accumulation plan, and the Australian Government Employee Superannuation Trust (AGEST). There are a small number of staff covered under various other superannuation schemes.

The CSS and PSS are defined benefit schemes for the Australian Government. The PSSap is a defined contribution scheme. The AGEST Superannuation Trust is an industry fund which was previously the Australian Government Default Superannuation fund for non-ongoing employees.

The liability for defined benefits is recognised in the financial statements of the Australian Government and is settled by the Australian Government in due course. This liability is reported in the Department of Finance's administered schedules and notes.

ARPANSA makes employer contributions to the employees' superannuation scheme at rates determined by an actuary to be sufficient to meet the current cost to the Government. ARPANSA accounts for the contributions as if they were contributions to defined contribution plans.

The liability for superannuation recognised as at 30 June represents outstanding contributions for the final fortnight of the year.

Note 4.2: Key management personnel remuneration

Key management personnel are those persons having authority and responsibility for planning, directing, and controlling the activities of the entity, directly or indirectly, including any director (whether executive or otherwise) of that entity. ARPANSA has determined the key management personnel to be the Chief Executive and 6 Branch and Office Heads. Key management personnel remuneration is reported in the table below:

	2022	2021
	\$	\$
Short-term employee benefits	1,581,987	1,736,247
Post-employment benefits	234,726	257,655
Other long-term employee benefits	36,582	40,118
Total key management personnel remuneration expenses ¹	1,853,295	2,034,020

1. The above key management personnel remuneration excludes the remuneration and other benefits of the Portfolio Minister. The Portfolio Minister's remuneration and other benefits are set by the Remuneration Tribunal and are not paid by the entity.

The total number of key management personnel that are included in the above table are 8 individuals (2021: 8). In 2022, 2 individuals were employed in key management personnel roles for part of the year only (2021: nil).

Note 4.3: Related party disclosures

Related party relationships:

The entity is an Australian Government controlled entity. Related parties to this entity are key management personnel including the Portfolio Minister and Executive, and other Australian Government entities.

Transactions with related parties:

Given the breadth of Government activities, related parties may transact with the government sector in the same capacity as ordinary citizens. Such transactions include the payment or refund of taxes, receipt of a Medicare rebate or higher education loans. These transactions have not been separately disclosed in this note.

Giving consideration to relationships with related entities, and transactions entered into during the reporting period by the entity, it has been determined that there are no related party transactions to be separately disclosed.

Managing uncertainties

This section analyses how ARPANSA manages financial risks within its operating environment.

Note 5.1: Contingent liabilities and assets

As at 30 June 2022 ARPANSA had no quantifiable or unquantifiable contingencies. (2021: Nil).

Accounting policy

Contingent liabilities and contingent assets are not recognised in the Statement of Financial Position but are reported in the notes. They may arise from uncertainty as to the existence of a liability or asset or represent an asset or liability in respect of which the amount cannot be reliably measured. Contingent assets are disclosed when settlement is probable but not virtually certain and contingent liabilities are disclosed when settlement is greater than remote.

Note 5.2: Financial instruments

Note 5.2A: Categories of financial instruments

	2022	2021
	\$	\$
Financial assets at amortised cost		
Cash and cash equivalents	5,181,632	1,207,753
Trade and other receivables	1,849,963	877,395
Other financials assets	566,323	530,715
Total financial assets at amortised cost	7,597,918	2,615,863
Financial liabilities measured at amortised cost		
Trade creditors	940,038	429,389
Total financial liabilities measured at amortised cost	940,038	429,389

Accounting policy

Financial Assets

ARPANSA classifies its financial assets in the following category:

a) financial assets measured at amortised cost.

The classification depends on both ARPANSA's business model for managing the financial assets and contractual cash flow characteristics at the time of initial recognition. Financial assets are recognised when ARPANSA becomes a party to the contract and, as a consequence, has a legal right to receive or a legal obligation to pay cash and derecognised when the contractual rights to the cash flows from the financial asset expire or are transferred upon trade date.

Financial Assets at amortised cost

Financial assets included in this category need to meet two criteria:

- 1. the financial asset is held in order to collect the contractual cash flows; and
- 2. the cash flows are solely payments of principal and interest (SPPI) on the principal outstanding amount.

Amortised cost is determined using the effective interest method.

Effective Interest Method

Income is recognised on an effective interest rate basis for financial assets that are recognised at amortised cost.

Impairment of Financial Assets

Financial assets are assessed for impairment at the end of each reporting period based on Expected Credit Losses, using the general approach which measures the loss allowance based on an amount equal to lifetime expected credit losses where risk has significantly increased, or an amount equal to 12-month expected credit losses if risk has not increased.

The simplified approach for trade receivables is used. This approach always measures the loss allowance as the amount equal to the lifetime expected credit losses.

A write-off constitutes a derecognition event where the write-off directly reduces the gross carrying amount of the financial asset.

Financial liabilities

Financial liabilities are classified as other liabilities. Financial liabilities are recognised and derecognised upon 'trade date'.

Other Financial Liabilities

Supplier and other payables are recognised at amortised cost. Liabilities are recognised to the extent that the goods or services have been received (and irrespective of having been invoiced).

Note 5.3: Fair value measurements

The following table provides an analysis of assets and liabilities that are measured at fair value.

Accounting policy

When an asset or liability, financial or non-financial, is measured at fair value for recognition or disclosure purposes, the fair value is based on the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date; and assumes that the transaction will take place either: in the principle market; or in the absence of a principal market, in the most advantageous market.

Fair value is measured using the assumptions that market participants would use when pricing the asset or liability, assuming they act in their economic best interest. For non-financial assets, the fair value measurement is based on its highest and best use. Valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, are used, maximising the use of relevant observable inputs, and minimising the use of unobservable inputs.

For recurring and non-recurring fair value measurements, external valuers may be used when internal expertise is either not available or when the valuation is deemed to be significant. External valuers are selected based on market knowledge and reputation. Where there is a significant change in fair value of an asset or liability from one period to another, an analysis is undertaken, which includes a verification of the major inputs applied in the latest valuation and a comparison, where applicable, with external sources of data.

Fail value measurements at the end of	value measurements at the end of the reporting period	
2022	2021	
\$	\$	
12,010,000	11,260,000	
16,659,500	17,234,805	
11,934,133	9,587,530	
40,603,633	38,082,335	
	2022 \$ 12,010,000 16,659,500 11,934,133	

Eair value measurements at the end of the reporting period

Note 5.3A: Fair value measurements

No change in valuation technique occurred during the period.

Other information

Note 6.1: Current/non-current distinction for assets and liabilities

	2022	2021
	\$	\$
Assets expected to be recovered in:		
No more than 12 months		
Cash and cash equivalents	5,181,632	1,207,753
Trade and other receivables	8,469,714	6,192,657
Other financial assets	566,323	530,715
Other non-financial assets	782,185	563,580
Inventory	1,750,046	1,700,982
Total no more than 12 months	16,749,900	10,195,687
More than 12 months		
Land and buildings	29,029,776	28,494,804
Plant and equipment	11,934,133	9,587,530
Computer software	914,218	557,683
Other intangibles	2,175	2,495
Total more than 12 months	41,880,302	38,642,513
Total assets	58,630,202	48,838,200
Liabilities expected to be settled in:		
No more than 12 months		
Suppliers	940,038	429,389
Other payables	5,077,596	915,115
Leases	216,809	160,239
Employee provisions	1,615,821	1,413,891
Total no more than 12 months	7,850,264	2,918,635
More than 12 months		
Leases	144,540	-
Employee provisions	4,351,611	4,320,633
Total no more than 12 months	4,496,151	4,320,633
Total liabilities	12,346,415	7,239,268

Part 6: Appendices

Appendix 1

ARPANSA licensing activities

ARPANSA strives to support high levels of licence holder compliance with the Act and Regulations. It does so by actively engaging with licensees, providing regulatory guidance and through a risk-informed program of regulatory oversight that includes self-reporting and inspection.

Details of licence breaches in the financial year

ARPANSA categorises breaches of licence conditions based on whether the potential risks to safety were either minor or significant. Breaches with minor implications for safety are typically administrative failures to meet regulatory requirements. Examples include poor safety signage, not keeping records or inventories up to date, not reviewing or updating plans and not submitting reports to ARPANSA on time.

Breaches with significant implications for safety typically occur where there is an actual exposure or a risk of insignificant exposure to people or the environment.

Breaches with significant implications for safety

The CEO was made aware of one breach with significant implication for safety:

ARPANSA self-reported that they did not obtain the prior approval of the CEO of ARPANSA to make a change that had significant implications for safety. During the upgrade of one of ARPANSA's linear accelerators, an alteration of the interlocks on the Elekta Synergy Linear Accelerator was made by a contractor. The contractor temporarily installed additional safety features that enabled them to perform the upgrade safely. Changes to interlocks are safety significant, as these ensure that people are not present in higher radiation areas. ARPANSA's regulatory team must be informed of changes to ensure that the change meets any required safety standards and, where necessary, intervene to verify those standards are met. Once a modification is implemented, any such changes may be costly and disruptive. ARPANSA is internally addressing the issues that contributed to the breach.

Breaches with no, or minor, safety implications during the year

The CEO was made aware of 6 breaches with minor safety implications or administrative failures to meet regulatory requirements:

On 2 occasions, it was determined that ANSTO had failed to comply with a licence condition which requires self-assessment, at least once every 3 years, against applicable codes and standards to ensure compliance. This occurred at the Gamma Technology Research Irradiator in Sydney and at the Australian Synchrotron in Melbourne. These reviews are an important aspect of a licence holder's own oversight and help to ensure any changes to codes and standards are considered in regard to workplace apparatus and practices and that, where appropriate, practices evolve to keep up with improving standards.

- During an inspection of the CSIRO Minerals and Resources, it was determined that the licence holder had not fully implemented the requirements of Security of Radioactive Sources (RPS No. 11) as required by paragraph 59(3)(b) of the Regulations; specifically, the security system does not have immediate detection and assessment measures in place.
- Department of Home Affairs self-reported procurement and subsequent possession of a CT scanner in 2015 when not authorised to deal with this kind of controlled apparatus. The apparatus was procured to gift to a foreign government.
- ANSTO self-reported failure to comply with a licence condition regarding the Operational Limits and Conditions which required periodic calibration of the pond ultrasonic level detectors in its waste operations group. The detectors were reported to be outside of the required OLC 3-yearly calibration period.
- Australian Trade and Investment Commission were found in breach for failing to provide compliance reports to the CEO of ARPANSA by the due dates. They were also found in breach for failing to seek approval under section 65 of the ARPANS Act before disposal of controlled apparatus or controlled material.

Details of any improvement notices or directions issued during the year

No improvement notices were issued by ARPANSA under section 80A of the ARPANS Act.

Other significant activities

The CEO of ARPANSA issued a licence to ANSTO to prepare a site for a nuclear installation. The facility will be known as the Intermediate Level Waste Capacity Increase store. This proposed facility will temporarily store intermediate level solid waste from the production of nuclear medicine and research until 2037. The current storage facility is predicted to reach capacity by 2027.

ARPANSA undertook an urgent review and approval of a back-up dissolution hot cell at the ANSTO Nuclear Medicine Facility. The dissolution hot cell is used for the dissolution of targets irradiated in the Open Pool Australian Lightwater (OPAL) reactor to extract the Mo-99 radiopharmaceutical. This was required urgently after an error led to the primary hot cell becoming inoperable, significantly impacting the supply of radiopharmaceuticals. ARPANSA will maintain oversight of the recovery plan and prioritise the assessment of any subsequent application that may be required to restore the primary hot cell to normal operation.

ARPANSA has closely overseen ANSTO monitoring of cracks identified on the primary cooling circuit of the OPAL reactor. The cracks effect the cooling circuit structure above the reactor core (the riser) located in the reactor pool and are subject to additional licence conditions that requires ANSTO to carry out periodic visual inspections for propagation. In accordance with an agreed defect mitigation and rectification plan, ARPANSA reviewed, analysed, and approved a request to manually operate flap valves which cause pressure pulses ANSTO believe to have caused the cracking.

ARPANSA approved and oversaw the safe and secure return of reprocessed intermediate level waste from the United Kingdom (UK) through Port Kembla to ANSTO's Lucas Heights site. ARPANSA worked with the UK nuclear regulator during the assessment and approval process and then supervised the unloading of the TN-81 package from the ship, the transport operation and commissioning of the package at the ANSTO Interim Waste Store.

ARPANSA held its annual licence holder forum in Canberra at the Australian National University in May 2022. The forum is an opportunity for our stakeholders to broaden their understanding of the regulatory requirements in place that will assist them with meeting their obligations and ultimately improve safety outcomes. The theme for this year's forum was radioactive waste with a panel discussion on predisposal management and waste acceptance. Other topics featured were the NRWMF, managing legacy waste, SyMo Facility and intermediate level waste capacity increase, and updates on ARPANSA's regulatory activities.

In addition to the specific activities mentioned, ARPANSA's regulatory service approved 22 requests to make changes significant to safety and 4 requests to construct items important for safety. Despite being heavily impacted by COVID-19 travel restrictions, ARPANSA also conducted 17 compliance inspections of licenced facilities or radiation sources.

Facility licences as at 30 June 2022

Commonwealth entity	Licences held
Australian National University	3
Australian Nuclear Science and Technology Organisation	19
Australian Radiation Protection and Nuclear Safety Agency	1
Department of Agriculture, Water, and the Environment	1
Department of Defence/Australian Defence Forces	4
Department of Home Affairs	4
Total	32

Source licences as at 30 June 2022

Commonwealth entity	Licences held
ASC Pty Ltd and ASC AWD Shipbuilder Pty Ltd	1
Attorney-General's Department	2
Australian Criminal Intelligence Commission	1
Australian Federal Police	1
Australian Institute of Marine Science	1
Australian National Maritime Museum	1
Australian National University	1
Australian Nuclear Science and Technology Organisation	3
Australian Postal Corporation	1
Australian Radiation Protection and Nuclear Safety Agency	2
Australian Securities and Investments Commission	1
Australian Signals Directorate	1
Australian Sports Commission	1
Australian Trade and Investment Commission	1
Australian Transaction Reports and Analysis Centre	1
Australian War Memorial	1
Commonwealth Bureau of Meteorology	1
Commonwealth Scientific and Industrial Research Organisation	9
Decipha Pty Ltd	1
Department of Agriculture, Water, and the Environment	6
Department of Defence/Australian Defence Forces	1
Department of Foreign Affairs and Trade	1
Department of Home Affairs	3
Department of Industry, Science, Energy and Resources	3
Department of Infrastructure, Transport, Regional Development and Communications	1
Department of Parliamentary Services	1
Department of the Prime Minister and Cabinet	1
Federal Court of Australia	1
High Court of Australia	1
Indian Ocean Territories Health Service	1

Commonwealth entity	Licences held
Law Courts Limited	1
National Gallery of Australia	1
National Museum of Australia	1
Norfolk Island Health and Residential Aged Care Service	1
Note Printing Australia	1
Reserve Bank of Australia	1
Royal Australian Mint	1
Silex Systems Limited	1
Total	59

Appendix 2

Operations of the Radiation Health and Safety Advisory Council and Committees

Operations of the Radiation Health and Safety Advisory Council

During 2021–22, the Radiation Health, and Safety Advisory Council (the Council) met twice virtually and twice inperson. Meeting summaries can be found a<u>t: www.arpansa.gov.au/rhsac-minutes</u>.

The membership on 30 June 2022 was:

Chair

• Dr Roger Allison (retired), former Radiation Oncologist and Executive Director Cancer Care Services, Royal Brisbane, and Women's Hospital.

CEO of ARPANSA

• Dr Gillian Hirth* (Commonwealth).

Radiation Control Officers

- Mr Keith Baldry (South Australia), Director, Regulation and Compliance, South Australian Environment Protection Authority.
- Mr John Piispanen (Queensland), Acting Executive Director, Health Protection Branch, Queensland Health.

Nominee of the Chief Minister of the Northern Territory

• Dr Hugh Heggie, Chief Health Officer, Department of Health of the Northern Territory.

Person to represent the interests of the general public

• Dr Peter Karamoskos, consultant radiologist at Epworth Medical Imaging.

Other members

- Dr Jane Canestra, medical practitioner and emergency physician with expertise in the health aspects of radiological emergencies
- Professor Adele Green, Head, Cancer and Population Studies Group, Queensland Institute of Medical Research
- Ms Melissa Holzberger, Director and Principal, Sloan Holzberger Lawyers
- Professor Pamela Sykes, Emeritus Professor Preventive Cancer Biology, Flinders University
- Dr Melanie Taylor, Senior Lecturer Organisational Psychology, Macquarie University
- Dr Trevor Wheatley, Adjunct Senior Lecturer and Chief Laser Safety Officer, University of New South Wales
- Mr Jim Hondros, Consultant, JRHC Enterprises, experience in mining and minerals processing, particularly with uranium and naturally occurring radioactive material.

*Commenced 22 March 2022

During 2021–22, the Council considered and discussed:

- The Department of Industry, Innovation and Science's plans for a NRWMF and an overview of the Australian Radioactive Waste Agency's early planning.
- ANSTO plans for the 2022 return of reprocessed nuclear fuel to Australia, and ARPANSA's associated increased regulatory workload and plans to avoid related delays.
- ARPANSA's work related to skin cancer caused by solar UVR, and separately, the risks associated with lasers and the lack of risk awareness, particularly around multi-spectral lasers.
- ARPANSA's involvement in the AUKUS nuclear submarine program and impacts on resourcing, noting any of the possible options for regulating nuclear submarines may require growth in the Agency's workforce.
- The International Commission for Radiological Protection (ICRP) review and revision of their System of Radiological Protection that will update the 2007 General Recommendations in ICRP Publication 103.

During 2021–22, the Council provided written advice to the CEO on investigating the public health impact of cosmetic NIR devices, on radiation exposure from increased medical imaging in Australia, and in relation to personal or other occupational (non-clinical) uses of laser technology.

Operations of the Radiation Health Committee

During 2021–22, the Radiation Health Committee (RHC) met on 4 occasions (once in-person). The meeting minutes are available at: <u>www.arpansa.gov.au/rhc-minutes.</u> The membership on 30 June 2022 was:

Chair

• Dr Roslyn Drummond (Victoria), Radiation Oncologist, Radiation Oncology and Cancer Imaging, Peter MacCallum Cancer Centre.

CEO of ARPANSA

• Dr Gillian Hirth* (Commonwealth).

Radiation Control Officers (each state and territory):

- Mr Bradley Feldtman (Northern Territory), Manager Radiation Protection, Department of Health
- Mr Daniel Bellifemine (South Australia), Acting Manager, Mining and Radiation Branch, Environment Protection Authority
- Ms Penny Hill (Australian Capital Territory), Assistant Director, Health Protection Service, ACT Health
- Mr Glenn Riley (Victoria), Senior Project Officer, Radiation Team, Health Protection Branch, Department of Health, and Human Services
- Mr Simon Critchley (Queensland), Director, Radiation Health, Queensland Health
- Ms Hazel Upton (Western Australia), Managing Health Physicist, Radiation Health Branch, Department of Health
- Dr Stephen Newbery (Tasmania), Principal Health Physicist, Population Health Services, Department of Health
- Mr Mark Carey (New South Wales), Principal Policy Officer, New South Wales Environment Protection Authority.

*Commenced 22 March 2022

Nuclear Safety Committee representative

• Dr Joanna Wriedt (Victoria), Member of Victorian Government's Radiation Advisory Committee.

Person to represent the interests of the general public

• Ms Fay Bellis (Victoria), Quality Management System Consultant.

During 2021–22, the RHC considered and discussed the following:

- A new standard that would help move towards a consistent approach to diagnostic and interventional Xray equipment compliance testing across jurisdictions.
- Advisory notes on updated occupational dose coefficients (a component of calculations used to provide radiation dose estimates) based on new data; on an explanation of health and well-being as referred to in ARPANSA's 2018 Code for Disposal Facilities for Solid Radioactive Waste; and on an explanation of 'incident' as referred to in ARPANSA's 2020 Code for Radiation Protection in Planned Exposure Situations.
- Advice on the role of oral health therapists in performing certain imaging procedures, under the Code of Practice and Safety Guide for Radiation Protection in Dentistry, and work undertaken to review that code.
- Ongoing work to review and provide updated codes and standards, including for radiation gauges and X-ray equipment, the security of radioactive sources, and human exposure to ionising radiation in research.
- The interactions of its program of work with related matters at enHealth, a standing committee of the Australian Health Protection Principal Committee.

During 2021-22, the RHC issued a statement advising that radiation workers should be permitted to carry their personal radiation monitoring devices through airport hand luggage security screening (to be checked by alternative screening processes) to avoid recording false high doses from X-ray security scanners.

Operations of the Nuclear Safety Committee

During 2021–22, the NSC met virtually or in-person on 3 occasions. Summaries of the meetings can be found at: www.arpansa.gov.au/nsc-minutes. The members of the committee were appointed on a 3-year term for 2021–2023 which commenced on 1 January 2021. The membership at 30 June 2022 was:

Chair:

• Dr Tamie Weaver, Technical Director - Hydrogeology, environmental resources management consultancy.

CEO of ARPANSA:

• Dr Gillian Hirth*.

Radiation Health Committee representative:

• Ms Fay Bellis, member of the Radiation Health Committee.

Local Government representative:

• Mr Ian Drinnan, Principal Environmental Scientist, Sutherland Shire Council.

Person to represent the interests of the general public:

• Dr Joanna Wriedt, experience in commercial law, government, and medical research.

Other members:

- Ms Jasmin Diab, nuclear engineer with experience in the Australian Defence Force
- Mr Tony Irwin, engineer with experience in nuclear power and research reactor operations; commissioning; training and regulatory interaction
- Dr John Loy, radiation protection and nuclear safety regulatory expert, with extensive experience internationally and in Australia
- Mr Cameron MacPhail, engineer with experience of process engineering and safety assurance within the defence, pharmaceutical, nuclear power, and water treatment industry
- Dr Peta Miller, consultant in safety management, ergonomics, and human factors, and an academic at UNSW
- Mr Stuart Parr, radiation protection advisor with experience in safety engineering and management including advice on nuclear regulatory compliance internationally
- Mr Peter Wilkinson, consultant in safety management and safety culture in hazardous industries.

*Commenced 22 March 2022

During 2021–22, the committee considered and discussed the matters including:

Review of regulatory documentation

The NSC reviewed and provided comment on a number of key topics including:

- a review of Australia's draft report to the UN, IAEA CNS
- a decision, and supporting documentation, to grant a licence for the siting of a new nuclear installation known as the ANSTO Intermediate Level Waste Capacity Increase facility
- ARPANSA's program to improve the focus on Human and Organisational Factors (HOF) including placing requirements for the consideration of HOF in the Regulations.

Update on controlled facilities

- Ongoing advice was provided regarding ARPANSA's approach to cracking in the ANSTO OPAL reactor riser, a component of the primary cooling system located within the reactor pool.
- ANSTO Health Products and ANSTO's Nuclear Medicine facilities were discussed, particularly in regard to safety improvements following a 2018 independent safety review, and an incident that caused the primary dissolution hot cell to be inoperable.

Appendix 3

Workforce Statistics

A3.1 All ongoing employees current report period (2021-22)

		Male		Female						
	Full	Part	Total	Full	Part	Total	Full	Part	Total	
	time	time	Male	time	time	Female	time	Time	Indeterminate	Total
NSW	13	0	13	7	0	7	0	0	0	20
VIC	57	1	58	46	6	52	0	0	0	110
Total	70	1	71	53	6	59	0	0	0	130

A3.2 All non-ongoing employees current report period (2021-22)

	Male			Female			Indeterminate			
	Full	Part	Total	Full	Part	Total	Full	Part	Total	
	time	time	Male	time	time	female	time	time	Indeterminate	Total
NSW	0	0	0	0	0	0	0	0	0	0
VIC	1	0	1	3	1	4	0	0	0	5
Total	1	0	1	3	1	4	0	0	0	5

A3.3 All ongoing employees previous report period (2020-21)

		Male			Female			Indeterminate		
	Full	Part	Total	Full	Part	Total	Full	Part	Total	
	time	time	Male	time	time	Female	time	Time	Indeterminate	Total
NSW	14	0	14	7	0	7	0	0	0	21
VIC	56	2	58	47	4	51	0	0	0	109
Total	70	2	72	54	4	58	0	0	0	130

A3.4 All non-ongoing employees previous report period (2020-21)

	Male			Female			Indeterminate			
	Full	Part	Total	Full	Part	Total	Full	Part	Total	
	time	time	Male	time	time	female	time	time	Indeterminate	Total
NSW	0	0	0	1	0	1	0	0	0	1
VIC	1	0	1	1	1	2	0	0	0	3
Total	1	0	1	2	1	3	0	0	0	4

		Male			Femal	e		Indete	erminate	
	Full	Part	Total	Full	Part	Total	Full	Part	Total	
	time	time	Male	time	time	female	time	time	Indeterminate	Total
SES3	0	0	0	0	0	0	0	0	0	0
SES2	0	0	0	0	0	0	0	0	0	0
SES1	3	0	3	0	0	0	0	0	0	3
EL2	15	0	15	4	1	5	0	0	0	20
EL1	26	1	27	16	0	16	0	0	0	43
APS6	18	0	18	12	1	13	0	0	0	31
APS5	5	0	5	0	5	5	0	0	0	10
APS4	2	0	2	0	5	5	0	0	0	7
APS3	0	0	0	5	3	8	0	0	0	8
APS2	0	0	0	0	3	3	0	0	0	3
APS1	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0
Total	69	1	70	37	18	55	0	0	0	125

A3.5 APS Act ongoing employees current report period (2021-22)

A3.6 APS Act non-ongoing employees current report period (2021-22)

		Male	0 1 2		Female			Indeter	minate	
	Full	Part	Total	Full	Part	Total	Full	Part	Total	
	time	time	Male	time	time	female	time	time	Indeterminate	Total
SES3	0	0	0	0	0	0	0	0	0	0
SES2	0	0	0	0	0	0	0	0	0	0
SES1	0	0	0	0	0	0	0	0	0	0
EL2	0	0	0	0	0	0	0	0	0	0
EL1	0	0	0	0	0	0	0	0	0	0
APS6	1	0	1	1	0	1	0	0	0	2
APS5	0	0	0	2	0	2	0	0	0	2
APS4	0	0	0	0	0	0	0	0	0	0
APS3	0	0	0	0	1	1	0	0	0	1
APS2	0	0	0	0	0	0	0	0	0	0
APS1	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0
Total	1	0	1	3	1	4	0	0	0	5

		Male			Femal	e		Indete	erminate	
	Full	Part	Total	Full	Part	Total	Full	Part	Total	
	time	time	Male	time	time	female	time	time	Indeterminate	Total
SES3	0	0	0	0	0	0	0	0	0	0
SES2	0	0	0	0	0	0	0	0	0	0
SES1	2	0	2	1	0	1	0	0	0	3
EL2	14	0	14	6	0	6	0	0	0	20
EL1	26	1	27	13	1	14	0	0	0	41
APS6	19	1	20	12	1	13	0	0	0	33
APS5	7	0	7	8	0	8	0	0	0	15
APS4	0	0	0	5	0	5	0	0	0	5
APS3	2	0	2	6	2	8	0	0	0	10
APS2	0	0	0	3	0	3	0	0	0	3
APS1	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0
Total	70	2	72	54	4	58	0	0	0	130

A3.7 APS Act ongoing employees previous report period (2020-21)

A3.8 APS Act non-ongoing employees previous report period (2020-21)

		Male	0 100	•	Female			Indeter	minate	
	Full	Part	Total	Full	Part	Total	Full	Part	Total	
	time	time	Male	time	time	female	time	time	Indeterminate	Total
SES3	0	0	0	0	0	0	0	0	0	0
SES2	0	0	0	0	0	0	0	0	0	0
SES1	0	0	0	0	0	0	0	0	0	0
EL2	0	0	0	0	0	0	0	0	0	0
EL1	1	0	1	0	0	0	0	0	0	1
APS6	0	0	0	1	0	1	0	0	0	1
APS5	0	0	0	0	1	1	0	0	0	1
APS4	0	0	0	1	0	1	0	0	0	1
APS3	0	0	0	0	0	0	0	0	0	0
APS2	0	0	0	0	0	0	0	0	0	0
APS1	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0
Total	1	0	1	2	1	3	0	0	0	4

		Ongoing			Non ongo	oing	
			Total			Total non-	
	Full time	Part time	Ongoing	Full time	Part time	ongoing	Total
SES3	0	0	0	0	0	0	0
SES2	0	0	0	0	0	0	0
SES1	3	0	3	0	0	0	3
EL2	19	1	20	0	0	0	20
EL1	42	1	43	0	0	0	43
APS6	30	1	31	2	0	2	33
APS5	10	0	10	2	0	2	12
APS4	5	0	5	0	0	0	5
APS3	7	3	10	0	1	1	11
APS2	3	0	3	0	0	0	3
APS1	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
Total	119	6	125	4	1	5	130

A3.9 APS Act employees by full time and part time status current report period (2021-22)

A3.10 APS Act employees by full time and part time status previous report period (2020-21)

		Ongoing			Non ong	oing	
	Full		Total			Total non-	
	time	Part time	Ongoing	Full time	Part time	ongoing	Total
SES3	0	0	0	0	0	0	0
SES2	0	0	0	0	0	0	0
SES1	3	0	3	0	0	0	3
EL2	20	0	20	0	0	0	20
EL1	39	2	41	1	0	1	42
APS6	31	2	33	1	0	1	34
APS5	15	0	15	0	1	1	16
APS4	5	0	5	1	0	1	6
APS3	8	2	10	0	0	0	10
APS2	3	0	3	0	0	0	3
APS1	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
Total	124	6	130	3	1	4	134

A3.11 APS Act empl	loyment type by location of	current report period (2021-22)

	Ongoing	Non ongoing	Total
NSW	20	0	20
VIC	105	5	110
Total	125	5	130

A3.12 APS Act employment type by location previous report period (2020-21)

	Ongoing	Non ongoing	Total
NSW	21	1	22
VIC	109	3	112
Total	130	4	134

A3.13 APS Act Indigenous employment current report period (2021-22)

	Total
Ongoing	0
Non ongoing	0
Total	0

A3.14 APS Act Indigenous employment previous report period (2020-21)

	Total
Ongoing	0
Non ongoing	0
Total	0

A3.15 APS Act employment arrangements current report period (2021-22)

	SES	Non-SES	Total
Enterprise Agreement	0	124	124
Individual Flexibility Arrangement	0	16	16
Common Law Contract	3	3	6
Total	3	143	146

A3.16 APS Act employment salary ranges by classification level (min/max) current report period (2021-22)

	Min salary (\$)	Max salary (\$)
SES 3	0	0
SES 2	0	0
SES 1	220,977	224,380
EL2	130,834	165,959
EL1	107,072	123,196
APS6	86,671	99,137
APS5	80,144	84,147
APS4	74,461	77,809
APS3	64,609	72,292
APS2	56,742	62,291
APS1	48,466	55,090
Other	0	0
Total	869,976	964,301

Part 7: Reference material

Abbreviations

ASG	Agency Security Group
ARC	Audit and Risk Committee
AASB	Australian Accounting Standards Board
ACDS	Australian Clinical Dosimetry Service
ANAO	Australian National Audit Office
ANRDR	Australian National Radiation Dose Register
AGEST	Australian Government Employee Superannuation Trust
AIIMS	Australasian Inter-service Incident Management System
ANSTO	Australian Nuclear Science and Technology Organisation
APS	Australian Public Service
ARIR	Australian Radiation Incident Register
ARMS	Australian Radiation Monitoring System
ARWA	Australian Radioactive Waste Agency
APDS	ARPANSA's performance and development system
AMS	ARPANSA management system
ARPANS Act	Australian Radiation Protection and Nuclear Safety Act
ARPANSA	Australian Radiation Protection and Nuclear Safety Agency
AUKUS	Australia, the United Kingdom and the United States
CEO	Chief Executive Officer
CNS	Convention on Nuclear Safety
COVID-19	Coronavirus disease
CRPG	Commonwealth Regulator Performance Guide
CSIRO	Commonwealth Scientific and Industrial Research Organisation
CSS	Commonwealth Superannuation Scheme
СТ	Computed tomography
СТВТ	Comprehensive Nuclear-Test-Ban Treaty
СТВТО	Comprehensive Nuclear-Test-Ban Treaty Organization
DRLs	Diagnostic reference levels
EAP	Employee Assistance Program
	·

EG	Executive group
EL	Executive level
EME	Electromagnetic energy
enHealth	Environmental Health Standing Committee
EPR	Emergency preparedness and response
F&E	Facilities and engineering
FRR	Financial Reporting Rule 2015
FY	Financial year
FOI	Freedom of information
FOI Act	Freedom of Information Act 1982
FBT	Fringe benefits tax
GSG	General Safety Guide
GST	Goods and Services Tax
IAEA	International Atomic Energy Agency
IMS	International Monitoring System
IRRS	Integrated Regulatory Review Service
KA	Key Activity
MRI	Magnetic resonance imaging
NATA	National Association of Testing Authorities
NDRLS	National Diagnostic Reference Level Service
NRWMF	National Radioactive Waste Management Facility
NIR	Non-ionising radiation
NPW	Nuclear Powered Warships
NSC	Nuclear Safety Committee
OBS	Office for Business Support
OCEO	Office of the Chief Executive Officer
OPAL	Open Pool Australian Lightwater
PBS	Portfolio Budget Statement
PGPA Act	Public Governance, Performance and Accountability Act 2013
PGPA Rule	Public Governance, Performance and Accountability Rule 2014
PMAG	Project Management Advisory Group
PRMS	Personal Radiation Monitoring Service
PSDL	Primary Standards Dosimetry Laboratory
PSS	Public Sector Superannuation Scheme

RF	Radiofrequency
RHC	Radiation Health Committee
ROU	Right of Use
RPOP	Radiation Protection of Patients
RPS	Radiation Protection Series
SES	Senior Executive Service
SMC	Strategic Management Committee
SCF	Staff Consultative Forum
UVR	Ultraviolet radiation
VSP(N)	Visiting Ships Panel (Nuclear)
VEEC	Victorian Energy Efficiency Certificates
WHS	Work health and safety
WHS Act	Work Health and Safety Act 2011

Glossary

_	
5G	5G is the fifth generation of mobile telecommunications. It provides improved connectivity over a wide range of frequencies to mobile phones and other devices on the wireless network. In Australia, 5G will initially use the same radio waves as the fourth generation (4G). In the future 5G will use radio waves called 'millimetre waves' which have a shorter range than the microwaves used in 4G. 5G infrastructure and devices like mobile phones emit radiofrequency and electromagnetic energy, also known as radio waves. ARPANSA sets the safety standards for exposure to radio waves.
Anechoic chamber	A specialised room that absorbs electromagnetic waves designed to perform EME measurements, calibrations, and research.
Australian Clinical Dosimetry Service (ACDS)	The ACDS is a national independent dosimetry auditing program, provided by ARPANSA, offering quality assurance for radiation oncology facilities and patients.
Australian National Radiation Dose Register (ANRDR)	A centralised repository for the radiation dose records of workers as supplied by the employers, maintained by ARPANSA. It is currently limited to those engaged in the uranium mining and milling industry in Australia.
Australian Radiation Incident Register (ARIR)	A national database of incidents and events related to radiation of radioactivity. The purpose of the database is to raise awareness on where, how, and why incidents and events occur, and how they can be best prevented.
Comprehensive Nuclear-Test-Ban Treaty (CTBT)	The Treaty aims to eliminate nuclear weapons by restricting the development and qualitative improvement of new types of nuclear weapons. ARPANSA is responsible for carrying out Australia's radionuclide monitoring obligations under the treaty. Our radionuclide laboratory is used to run daily tests to detect the presence of radioactive particles that are characteristic of nuclear explosion.
diagnostic reference level (DRL)	Is an indicative dose that is not expected to be exceeded under normal imaging conditions for a given diagnostic task, such as a CT scan. A DRL is not a regulatory limit, it is a benchmark that provides a simple method of identifying situations where they are delivering an unusually high patient dose.
dose	A generic term that may mean absorbed dose, equivalent dose or effective dose depending on context.
electromagnetic energy	Energy that can travel through space in the form of electromagnetic waves. There are many forms of electromagnetic energy including gamma rays, X-rays, ultraviolet radiation, visible light, infrared radiation, microwaves and radiofrequency radiation.
Integrated Regulatory Review Service (IRRS)	A peer-review service offered by the IAEA to strengthen and enhance the effectiveness of a national regulatory system in nuclear, radiation, radioactive waste, transport safety and nuclear security.
International Atomic Energy Agency (IAEA)	The IAEA is the international centre for cooperation in the nuclear field. The Agency works with its Member States and multiple partners worldwide to promote the safe, secure and peaceful use of nuclear technologies.
ionising radiation	Radiation that is capable of causing ionisation – the process in which an electron is given enough energy to break away from an atom. Ionising radiation has enough energy to cause chemical changes by breaking chemical bonds. This effect can cause damage to living tissue. Examples of ionising radiation include X-rays, electrons (beta radiation) and particles (e.g., Alpha radiation).
licence	A written authorisation issued to an operator that allows the operator to carry out an operation legally.

linear accelerator	Linear accelerators (linacs) are the medical devices used to deliver radiation therapy in highly targeted doses by generating directed radiation beams. These machines are used in hospitals and medical facilities to treat cancers.
National Radioactive Waste Management Facility (NRMWF)	The proposed NRWMF will manage waste generated in Australia. It will be designed to permanently dispose of low-level waste and potentially store intermediate-level waste on a temporary basis. The facility will only manage immobilised solid waste. More information can be found at: <u>www.arpansa.gov.au/NRWMF-radioactive-waste</u> .
non-ionising radiation (NIR)	Radiation that does not produce ionisation – the process in which an electron is given enough energy to break away from an atom. When these radiations pass through the tissues of the body, they do not have sufficient energy to damage DNA directly. Examples of NIR include static and low frequency electric and magnetic fields, radio waves, visible light, and ultraviolet radiation.
Personal Radiation Monitoring Service (PRMS)	The Personal Radiation Monitoring Service (PRMS) monitors potential ionising radiation exposure to workers in fields such as medical, dental, chiropractic, industrial and mining. PRMS provides and assesses monitors that measure Australian workers' occupational exposure to radiation to ensure that the recommended dose limit is not exceeded.
Primary standard	Primary standards are instruments or artefacts that allow for the determination of a quantity with the highest possible accuracy. ARPANSA maintains four primary standards for the dosimetry of ionising radiation for Australia.
radiation	Electromagnetic waves or quanta, and atomic or sub-atomic particles, propagated through space or through a material medium.
radiofrequency	Part of the electromagnetic spectrum with frequencies in the range 3 khz to 300 ghz.
radiofrequency radiation	Electromagnetic energy in the radiofrequency range.
Talk to a Scientist	ARPANSA's phone and email service that allows members of the public to talk directly to ARPANSA scientists about questions or concerns relating to radiation exposure and protection and nuclear issues.

PGPA Reporting requirements

PGPA Rule Reference	Part of report	Description	Requirement	Page
17AD(g)	Letter of transmittal			
17AI	Letter of transmittal	A copy of the letter of transmittal signed and dated by accountable authority on date final text approved, with statement that the report has been prepared in accordance with section 46 of the Act and any enabling legislation that specifies additional requirements in relation to the annual report.	Mandatory	5
17AD(h)	Aids to access			
17AJ(a)	Table of contents.	Table of contents.	Mandatory	1
17AJ(b)	Alphabetical index.	Alphabetical index.	Mandatory	151
17AJ(c)	Glossary	Glossary of abbreviations and acronyms.	Mandatory	142
17AJ(d)	Reporting requirements	List of requirements.	Mandatory	144
17AJ(e)	Publication Details	Details of contact officer.	Mandatory	2
17AJ(f)	Publication Details	Entity's website address.	Mandatory	2
17AJ(g)	Publication Details	Electronic address of report.	Mandatory	2
17AD(a)	Review by accountable authority			
17AD(a)	CEO Foreword	A review by the accountable authority of the entity.	Mandatory	7
17AD(b)	Overview of the entity			
17AE(1)(a) (i)	Role of ARPANSA	A description of the role and functions of the entity.	Mandatory	10
17AE(1)(a) (ii)	Organisational structure	A description of the organisational structure of the entity.	Mandatory	12
17AE(1)(a) (iii)	Our outcome and programmes	A description of the outcomes and programmes administered by the entity.	Mandatory	10
17AE(1)(a) (iv)	Purposes	A description of the purposes of the entity as included in corporate plan.	Mandatory	10
17AE(1) (aa)(i)	Responsible ministers and portfolio	Name of the accountable authority or each member of the accountable authority.	Mandatory	11
17AE(1) (aa)(ii)	Responsible ministers and portfolio	Position of the accountable authority or each member of the accountable authority.	Mandatory	11
17AE(1) (aa)(iii)	Chief Executive Officer	Period as the accountable authority or member of the accountable authority within the reporting period.	Mandatory	11

17AE(1)(b)	N/A	An outline of the structure of the portfolio of the entity.	Portfolio departments – mandatory	-
17AE(2)	N/A	Where the outcomes and programs administered by the entity differ from any Portfolio Budget Statement, Portfolio Additional Estimates Statement or other portfolio estimates statement that was prepared for the entity for the period, include details of variation and reasons for change.	If applicable, Mandatory	-
17AD(c)	Report on the Performa	nce of the entity		16
Annual perfor	mance statements			
17AD(c)(i); 16F	Annual performance statement	Annual performance statement in accordance with paragraph 39(1)(b) of the Act and section 16F of the Rule.	Mandatory	16
17AD(c)(ii)	Report on financial perfe	ormance		51
17AF(1)(a)	Financial performance	A discussion and analysis of the entity's financial performance.	Mandatory	51
17AF(1)(b)	Annual resource statement	A table summarising the total resources and total payments of the entity.	Mandatory	55
17AF(2)	N/A	If there may be significant changes in the financial results during or after the previous or current reporting period, information on those changes, including: the cause of any operating loss of the entity; how the entity has responded to the loss and the actions that have been taken in relation to the loss; and any matter or circumstances that it can reasonably be anticipated will have a significant impact on the entity's future operation or financial results.	If applicable, Mandatory.	-
17AD(d)	Management and accountability			57
Corporate gov	vernance			
17AG(2)(a)	Audit and fraud control	Information on compliance with section 10 (fraud systems).	Mandatory	63
17AG(2)(b)(i)	Letter of transmittal	A certification by accountable authority that fraud risk assessments and fraud control plans have been prepared.	Mandatory	5
17AG(2)(b)(ii)	Letter of transmittal	A certification by accountable authority that appropriate mechanisms for preventing, detecting incidents of, investigating or otherwise dealing with, and recording or reporting fraud that meet the specific needs of the entity are in place.	Mandatory	5
17AG(2)(b)(iii)	Letter of transmittal	A certification by accountable authority that all reasonable measures have been taken to deal appropriately with fraud relating to the entity.	Mandatory	5
	•			

17AG(2)(c)	Corporate governance	An outline of structures and processes in place for the entity to implement principles and objectives of corporate governance.	Mandatory	57
17AG(2)(d) – (e)	N/A	A statement of significant issues reported to Minister under paragraph 19(1)(e) of the Act that relates to non-compliance with Finance law and action taken to remedy non-compliance.	If applicable, Mandatory	-
	Audit Committee			
17AG(2A) (a)	Audit and Risk Committee	A direct electronic address of the charter determining the functions of the entity's audit committee.	Mandatory	58
17AG(2A) (b)	Audit committee members	The name of each member of the entity's audit committee.	Mandatory	59
17AG(2A) (c)	Audit committee members	The qualifications, knowledge, skills or experience of each member of the entity's audit committee.	Mandatory	59
17AG(2A) (d)	Audit committee members	Information about the attendance of each member of the entity's audit committee at committee meetings.	Mandatory	59
17AG(2A) (e)	Audit committee members	The remuneration of each member of the entity's audit committee.	Mandatory	59
External Scru	tiny			·
17AG(3)	External Scrutiny	Information on the most significant developments in external scrutiny and the entity's response to the scrutiny.	Mandatory	65
17AG(3)(a)	N/A	Information on judicial decisions and decisionsIf applicaof administrative tribunals and by the AustralianMandatoInformation Commissioner that may have asignificant effect on the operations of the entity.		65
17AG(3)(b)	Reports by the Auditor-General, Parliamentary Committee, or the Commonwealth Ombudsman.	Information on any reports on operations of the entity by the Auditor-General (other than report under section 43 of the Act), a Parliamentary Committee, or the Commonwealth Ombudsman.	If applicable, Mandatory	65
17AG(3)(c)	N/A	Information on any capability reviews on the entity that were released during the period.	If applicable, Mandatory	-
Management	of Human Resources			
17AG(4)(a)	Human resources	An assessment of the entity's effectiveness in managing and developing employees to achieve entity objectives.	Mandatory	67
17AG(4) (aa)	Workforce statistics	Statistics on the entity's employees on an ongoing and non-ongoing basis, including the following:	Mandatory	134
		(a) statistics on full-time employees;(b) statistics on part-time employees;		

		(c) statistics on gender;		
		(d) statistics on staff location.		
17AG(4)(b)	Workforce statistics	Statistics on the entity's APS employees on an ongoing and non-ongoing basis; including the following:	Mandatory	134
		• Statistics on staffing classification level;		
		• Statistics on full-time employees;		
		• Statistics on part-time employees;		
		• Statistics on gender;		
		Statistics on staff location;		
		• Statistics on employees who identify as Indigenous.		
17AG(4)(c)	Employment arrangements	Information on any enterprise agreements, individual flexibility arrangements, Australian workplace agreements, common law contracts and determinations under subsection 24(1) of the <i>Public Service Act 1999</i> .	Mandatory	138
17AG(4)(c)(i)	Employee arrangements	Information on the number of SES and non-SES employees covered by agreements etc identified in paragraph 17AG(4)(c).	Mandatory	138
17AG(4)(c)(ii)	Salary ranges by classification	The salary ranges available for APS employees by classification level.	Mandatory	138
17AG(4)(c)(iii)	Non-salary benefits	A description of non-salary benefits provided to employees.	Mandatory	68
17AG(4)(d)(i)	N/A	Information on the number of employees at each classification level who received performance pay.	If applicable, Mandatory	-
17AG(4)(d)(ii)	N/A	Information on aggregate amounts of performance pay at each classification level.	If applicable, Mandatory	-
17AG(4)(d)(iii)	N/A	Information on the average amount of performance payment, and range of such payments, at each classification level.	If applicable, Mandatory	-
17AG(4)(d)(iv)	N/A	Information on aggregate amount of performance payments.	If applicable, Mandatory	-
Assets Manage	ement	•	l	
17AG(5)	N/A	An assessment of effectiveness of assets management where asset management is a significant part of the entity's activities.	If applicable, Mandatory	-
	Purchasing			
17AG(6)	Purchasing	An assessment of entity performance against the Commonwealth Procurement Rules	Mandatory	52
Reportable co	nsultancy contracts	1		
17AG(7)(a)	Consultants	A summary statement detailing the number of new contracts engaging consultants entered into	Mandatory	53

		during the period; the total actual expenditure on all new consultancy contracts entered into during the period (inclusive of GST); the number of ongoing consultancy contracts that were entered into during a previous reporting period; and the total actual expenditure in the reporting year on the ongoing consultancy contracts (inclusive of GST).		
17AG(7)(b)	Consultants	A statement that: 'During [reporting period], [specified number] new reportable consultancy contracts were entered into involving total actual expenditure of \$[specified million]. In addition, [specified number] ongoing reportable consultancy contracts were active during the period, involving total actual expenditure of \$[specified million]'.	Mandatory	53
17AG(7)(c)	Consultants	A summary of the policies and procedures for selecting and engaging consultants and the main categories of purposes for which consultants were selected and engaged.	Mandatory	53
17AG(7)(d)	Consultants	A statement that: 'Annual reports contain information about actual expenditure on reportable consultancy contracts. Information on the value of reportable consultancy contracts is available on the AusTender website.'	Mandatory	53
Reportable n	on-consultancy contracts			
17AG(7A) (a)	Consultants	A summary statement detailing the number of new reportable non-consultancy contracts entered into during the period; the total actual expenditure on such contracts (inclusive of GST); the number of ongoing reportable non- consultancy contracts that were entered into during a previous reporting period; and the total actual expenditure in the reporting period on those ongoing contracts (inclusive of GST).	Mandatory	54
17AG(7A) (b)	Consultants	A statement that: 'Annual reports contain information about actual expenditure on reportable non-consultancy contracts. Information on the value of reportable non-consultancy contracts is available on the AusTender website.'	Mandatory	54
17AD(daa)		about organisations receiving amounts under report non-consultancy contracts	able consultancy	
17AGA	Expenditure on reportable non- consultancy contracts	Additional information, in accordance with section 17AGA, about organisations receiving amounts under reportable consultancy contracts or reportable non-consultancy contracts.	Mandatory	54

17AG(8)	N/A	If an entity entered into a contract with a value of more than \$100 000 (inclusive of GST) and the contract did not provide the Auditor-General with access to the contractor's premises, the report must include the name of the contractor, purpose and value of the contract, and the reason why a clause allowing access was not included in the contract.	If applicable, Mandatory	-
Exempt con	tracts			
17AG(9)	N/A	If an entity entered into a contract or there is a standing offer with a value greater than \$10 000 (inclusive of GST) which has been exempted from being published in AusTender because it would disclose exempt matters under the FOI Act, the annual report must include a statement that the contract or standing offer has been exempted, and the value of the contract or standing offer, to the extent that doing so does not disclose the exempt matters.	If applicable, Mandatory	-
Small busin	ess		•	·
17AG(10) (a)	Procurement initiatives to support small business	A statement that: '[Name of entity] supports small business participation in the Commonwealth Government procurement market. Small and Medium Enterprises (SME) and Small Enterprise participation statistics are available on the Department of Finance's website.'	Mandatory	54
17AG(10) (b)	Procurement initiatives to support small business	An outline of the ways in which the procurement practices of the entity support small and medium enterprises.	Mandatory	54
17AG(10) (c)	Procurement initiatives to support small business	If the entity is considered by the Department administered by the Finance Minister as material in nature – a statement that: '[Name of entity] recognises the importance of ensuring that small businesses are paid on time. The results of the Survey of Australian Government Payments to Small Business are available on the Treasury's website.'	If applicable, Mandatory	
Financial st	atements			
17AD(e)	Financial statements	Inclusion of the annual financial statements in accordance with subsection 43(4) of the Act.	Mandatory	77
17AD(da)	Executive remuneration	Information about executive remuneration in accordance with Subdivision C of Division 3A of Part 2-3 of the Rule.	Mandatory	69

17AD(f)				
Other mandatory information				
17AH(1)(a)(i)	N/A	If the entity conducted advertising campaigns, a statement that:	If applicable, Mandatory	
		'During [reporting period], the [name of entity] conducted the following advertising campaigns: [name of advertising campaigns undertaken]. Further information on those advertising campaigns is available at [address of entity's website] and in the reports on Australian Government advertising prepared by the Department of Finance. Those reports are available on the Department of Finance's website.'		
17AH(1)(a)(ii)	Advertising and marketing research	If the entity did not conduct advertising campaigns, a statement to that effect.	If applicable, Mandatory	54
17AH(1)(b)	N/A	A statement that: 'Information on grants awarded by [name of entity] during [reporting period] is available at [address of entity's website].'	If applicable, Mandatory	
17AH(1)(c)	Disability reporting mechanisms	Outline of mechanisms of disability reporting, including reference to website for further information.	Mandatory	72
17AH(1)(d)	Freedom of information	Website reference to where the entity's Information Publication Scheme statement pursuant to Part II of FOI Act can be found.	Mandatory	66
17AH(1)(e)	N/A	Correction of material errors in previous annual report.	If applicable, mandatory	
17AH(2)	Appendix 1 and Appendix 2	Information required by other legislation.	Mandatory	123, 129

Index

Α	
absorbed dose	13, 142
advertising and market research	54
advice	8-14, 17-19, 24, 27, 40, 56, 58, 61, 91, 130- 133
advisory bodies	4, 57
Annual Performance Statement	4, 16, 145
APS census	38, 67, 72
ARPANSA Award	74
asset management	52, 148
audits	63, 65
clinical	13, 19, 22, 41
quality	63
audit and fraud control	63, 145
Audit and Risk Committee	58-59, 62, 139, 146
Australia, the United Kingdom and the United States (AUKUS)	7, 17, 33, 130, 139
Australian Clinical Dosimetry Service (ACDS)	13, 22, 27, 30, 36, 38, 41, 49, 63, 82, 96-97, 139, 142
Australian National Audit Office (ANAO)	63, 94, 98, 139
Australian National Radiation Dose Register (ANRDR)	13, 19, 21, 49, 139, 142
Australian Nuclear Science and Technology Organisation (ANSTO)	23, 26, 31-32, 35, 44, 124-125, 130, 133, 139
Australian Radiation Incident Register	19, 24, 139, 142
Australian radiotherapy providers	22
C	1
calibration services	29, 63
cancer	8, 22, 41, 48, 143
skin cancer	40, 130
cancer treatment	8, 22, 41

Code of Conduct	74
codes and standards	57-58, 64, 123, 131
Comcare	65, 74
common law contracts	68, 73, 138, 147
complaints	65
Comprehensive Nuclear-Test-Ban Treaty (CTBT)	27-28, 97, 139, 142
Organization (CTBTO)	27-28, 139
consultants	53, 94, 148-149
corporate plan	9, 17, 20-23, 28-30, 32-34, 37-38, 57, 62-63, 144
D	
diagnostic reference level (DRL)	19-20, 27, 30, 139, 140, 142
directions (see also improvement notices)	5, 9, 57, 63, 125
disability reporting	150
dose register (see Australian National Radiation Dose Register)	13, 139, 142
dosimetry	8, 13, 19, 22, 33, 41, 49, 97, 139-140, 142- 143
E	
electromagnetic energy	8, 25, 41, 140, 142-143
emergency preparedness and response	13, 26, 46, 140
employee assistance program	64, 69, 140
Enterprise Agreement	61, 68-69, 73, 138, 147
executive remuneration	69, 70, 150
F	
fifth generation (5G)	8, 42, 47, 142
freedom of information	4, 14, 65-66, 140, 150
н	
hazard and incident reporting	64
Health, Department of	5, 11, 38, 46
human resources	4, 13, 67, 146-147

٦

1	
International Atomic Energy Agency (IAEA)	7, 26, 31, 34, 44-45, 48-49, 51, 133, 140, 142
improvement	26-29, 31, 34, 37, 46, 48, 51, 60, 64, 66-67, 72, 74, 102, 105, 133, 142
improvement notices or directions	5, 65, 124
incident reporting	51,64
Information Publication Scheme	65-66, 150
Integrated Regulatory Review Service (IRRS)	7-8, 31, 34-35, 45-46, 140, 142
J	
Judicial review	65
К	
Key management personnel	69, 78, 116-117
L	
licence	85, 133, 142
applications	12, 19, 23, 33, 82, 98
breaches	5, 123
fees	12, 36, 38, 52, 81, 82, 97
holder	12, 21, 31-34, 51, 123-125
source	12, 124-126
Μ	
management committees	57, 60
market research	54
Ν	
National Association of Testing Authorities (NATA)	63-64, 140
National Radioactive Waste Management Facility (NRWMF)	7, 19, 23, 44-45, 125, 130, 140, 143
national uniformity	12,44
Nuclear Safety Committee (NSC)	5, 12, 57-58, 131, 132-133, 140
Ρ	
performance pay	73, 147
Personal Radiation Monitoring Service (PRMS)	29, 67, 96-97, 140, 143

Г

primary standard	8, 13, 48, 140, 143
R	
Radiation Health and Safety Advisory Council (the Council)	5, 12, 57-58, 129-130
Radiation Health Committee (RHC)	5, 12, 57-58, 130-132, 141
radioactive source	125, 131
radiofrequency	8, 29, 42, 63, 141-143
Regulator Performance Framework (RPF)	33
risk management	4, 49, 61-62, 64
S	
safety culture	32, 60, 132
salary ranges	75, 138, 147
Strategic Management Committee (SMC)	60, 141
т	
'Talk to a Scientist' Program	27, 30, 42, 143
U	
Ultraviolet radiation (UVR)	13, 27, 29, 40-41, 47, 63, 67, 130, 141, 143
W	
work health and safety (WHS)	60, 64-65, 141
workers compensation	65
workforce plan	36, 38-39